











## FRONTISPIECE.



TO TELL A CARD THOUGHT OF  
*See p. 56*



THE INEXHAUSTIBLE BOTTLE  
*See p. 234*



THE MAGIC STEW-PAN.  
*See p. 237.*



THE WONDERFUL HANDKERCHIEF,  
*See p. 135.*

FROM SIMPLE CONJURING TO GRAND MAGIC.

# THE SECRET

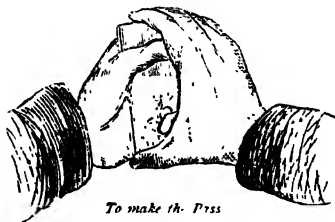
OR,

ONE THOUSAND TRICKS

DRAWING-ROOM, OR WHITE MAGIC.

WITH

AN ENDLESS VARIETY OF ENTERTAINING EXPERIMENTS.



*To make the Press*

BY THE AUTHOR OF  
‘THE MAGICIAN’S OWN BOOK.’

TRANSLATED AND EDITED BY  
W. H. CREMER, JUNR.,  
Of Regent Street.

WITH THREE HUNDRED ILLUSTRATIONS.

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(SUCCESSORS TO JOHN CAMDEN HOTTEN.)



## PRELIMINARY.

THIS work is the result of twenty-five years' active experience, both as an amateur and as a professed magician. The author has no apology to make for its publication. The reason will be apparent upon the slightest inspection of the table of contents. THE BOOK IS A PERFECT DESIDERATUM FOR THE SOCIAL CIRCLE, and is calculated to carry merriment to every fireside in the three kingdoms.

It may be said that cards are looked upon with considerable distrust by the circumspect members of society; but does not the objection exclusively apply, less to the pictured paper itself, which, for want of a better title, we call a "card," than its employment by unprincipled men in games of hazard and cupidity? This book repudiates all such immoral associations. It is not designed for professional use, nor yet for illicit instruction. A thorough scrutiny will demonstrate, even to the satisfaction of the prejudiced, that it is not available for such purposes. The primary object of its preparation has been to expand the narrow limit of unexceptionable family entertainment, and incidentally to furnish both the cottage and the villa with the means of creating many a joyous laugh at the expense of anything but what is serious or reverent. Those, therefore, who very properly contemplate a proficiency in games of cards as a somewhat apocryphal recommendation, can certainly discover nothing to reprehend in our rules for the clever performance of simple tricks adapted only to parlour space and parlour resources.

The author frankly owns his partial indebtedness in the composition of the present volume to the great

French standard authority "Le Magicien des Salons," révisé by references to Decremps, Servièrre, Leopold, Besson, Kircher, Hildebrandi, Ozanam, &c., &c. But he distinctly claims these eminent qualities for THE SECRET OUT, viz :—

*Firstly* —That it is without a parallel in the world of books as a complete revelation of the rudiments and principles of "Sleight-of-Hand," as well as a thorough analysis of the theory and practice of "White Magic."

*Secondly*.—That it is, thoroughly unique in its lucid intelligibility, its choicæ variety of exercises, and its amplitude as a fund of harmless, domestic amusements.

The language used to familiarize the reader with the voluminous list of recreations collected in this volume, is studiously clear, and the explanations are exceedingly minute. The numerous illustrations are plain and appropriate. The most unlearned, therefore, may confidently count upon *performing with ease every feat indicated*, provided he pay sufficient attention to the details of each, and acquire by habit the necessary dexterity. The common complaint of amateurs, that they are too vaguely instructed, will not apply to THE SECRET OUT. It is *practical*. The impatient, who seek to accomplish too much at once, and the heedless, who persist in deviating from the clearest instructions, are never remarkable for their triumphs in any quarter; but THE SECRET OUT embraces no trick whatever—whether it be a Trick with Cards, or a Sleight-of-Hand Trick, a Trick with Apparatus, a Trick with Dominoes, a Trick in White Magic, or in Natural Magic, &c.—which cannot be completely accomplished by ordinary intelligence, and with ordinary assiduity. What more could be desired by the most exacting?

With this pledge of his sincerity, the work is left to speak for itself with never-failing eloquence of entertainment and ability, by

W. H. CREMER, JUNR.



## PART I.—GENERAL TRICKS.

### The Landlord and the Merrymakers.

ONE knave is put secretly at the bottom of the pack, from which have been taken the other three, and of the queens. You show the three knaves, and

This trio of merry dogs went into a tavern and ate a night of it, though they hadn't a penny to meet score; they planned together to slip out of doors without paying the publican's wife (you hold up the pack); when, after asking her to see if she had change for a ten-pound note upstairs, they ran off, each his own way."

Put one jack below the pack, one on top, and one in the middle.

The landlady came down into the bar, and not seeing the tricksters, ran after them." Put the queen on top of the pack.

"And she overtook the rascals."

Cut and show that the queen and knaves have come together.



### To Show that an Egg contains a



You let one of the company select a card, and another take an egg from a number on a salver, which is to be held up to the light, and otherwise tested to prove that it has no foreign substance in it. You, however, distinctly assert that you can see a spade, a heart, a club, or a diamond in it, as the case may be. You pretend to let it fall, but catch it as it touches the table, which fall cracks the big end a little. You then touch it with your wand, and break it in a plate, when a card is found in the meat.

*Explanation.*—You of course "force the card" (see "How to Force a Card," in this book); its duplicate you have rolled up, and put into the hollow of an imitation wand, like your own outwardly, which is but a tube, through which slides a piston-rod with a large top, which drives anything placed in the barrel from one end to the other. In putting the muzzle of this barrel to the egg, which you hold firmly with the left hand, you work the rod upwards with the right, and easily send the card, rolled up neatly, into the shell.

You could, moreover, have had the chosen card made away with, by being put in your Disappearing Box, or burnt, or cut into minute shreds, to enhance the illusion.



### To Tell beforehand what Cards will be Chosen.

Make two piles of cards, one to have seven cards besides two or three sevens, and the other seven face cards. Write on a piece of paper the figure 7, turning it down to prevent any one seeing what you have written. Now, your number will suit any problem, since, if the larger lot is picked out, you show your written paper, and say, if a *seven* was not chosen, the

sevens excluded, there must be seven cards; or, if the other lot, you likewise win, as that packet contained seven cards.



### To Restore a Poor Jack's Lost Leg.

Paint one side of a thin piece of sheet-lead the size of a playing card, black, and on the other glue some tobacco dust. Put it into a snuff-box which it will fit neatly. In the lid put a knave exactly like that which you are to have torn, and from which you will also tear a small piece. Put the leaden plate in the lid, with the tobacco-side against the card.\* Having "forced" the corresponding knave, you will let some one tear it in two, and observe that—"Poor Jack seems to have fared ill at the wars, having lost his head or legs (according to the damage done him); but time will mend him, when he has so good a *backer* as your box contains." Take one half, and let the other person tear up his moiety at the same time you do yours. Then declare you will bring all the fragments together. Collect his and your pieces on a table, and open your box upside down, so that the plate is covered with snuff; you pretend to make merry of your clumsiness, as you put the snuff fallen out and the bits of card properly into the box. Before closing it, you advise the party that he had better retain a lock of Jack's hair, to remember him by, and give him the corner you tore off the first card. Shut the box, and the leaden plate will fall to the bottom, safely closing in the torn knave. Open the box and display the card, only lacking that very piece which the person had held. Use a pewter box, as the best.



### An elegant Card Trick.

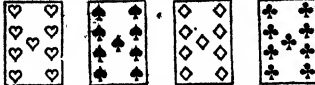
Arrange a pack in order, leading off with the



etc., until all the suits are so placed, and then put them

together one after another. Have the pack cut, and deal them out face down, saying to yourself, "Ace, king, queen," etc.,



until they come out four and four of a sort, as the  
 for instance. Then turn  
 them up and deal out the  
 four aces together, follow-  
 ing with the four picture  
 cards, and so on.



### To Tell Cards Thought of.

Deal out twenty cards in pairs on the table, and let  
 several persons take each the two cards of the ten lots  
 you will have made. Collect them all and put them,  
 without having scattered the pairs, on the table by the  
 rule here given:—

M	U	T	U	S
1	2	3	4	5
D	E	D	I	T
6	7	8	9	10
N	O	M	E	N
11	12	13	14	15
C	OE	C	I	S
16	17	18	19	20

The first two are put on the numbers 1 and 13, the  
 second pair on 2 and 4, the third on 3 and 10, and so  
 on, in the order of the two similar letters; and when  
 you have been told that the two cards thought of are,  
 for instance, in the second row, you know that they are  
 those upon 6 and 8. If it was said that they were in  
 the second and fourth rows, you see likewise that they  
 are at 9 and 19, for the four words are composed of  
 twenty letters, two of a sort.



### The Unfaithful Knave.

Show a king and say, "This mighty monarch received,  
 for his Christmas-box, a hamper of wine, containing  
 thirty-two bottles (here take any thirty-two cards, and  
 put them face down in dealing them), which he stowed  
 away in his palatial vaults, by the hands of his knave

(show a knave), in the following order, pointing out to the rascal that there were nine bottles each side:—

1	7	1
7		7
1	7	1

But the varlet fell into bad company, and to have a bottle a-piece with his three partners (show the other jacks), stole four on each of three occasions, and, nevertheless, the royal potentate, though he liked a potent drink, and often examined his cellar, the servant each visit showed him that there were nine bottles in each side."

#### *Order of the Bottles.*

1st time, 28 Bottles.

2	5	2
5		5
2	5	2

2nd time, 24.

3	3	3
3		3
3	3	3

3rd time, 20.


4	1	4
1		1
4	1	4




#### **The Blind Abbot and his Monks.**

This is a variation of the last trick. You speak as follows: "Once upon a time there was a monarch (hold up the king of hearts), who, falling blind, retired from business and became an abbot. The convent was built round a square court-yard, and, while the superior lived in a hut in the yard, his twenty-four monks dwelt, three together, in each of the eight cells." (You put down the king of hearts on the table, and three by three put down six cards of each suit, in the figure given as the position of the nine bottles, second time, Unfaithful Knave, saying), "Six black penitents (put down six clubs), six red future cardinals (six hearts), six repentant misers (six diamonds), and six nannies, who had retired from the hollow vanities of the earth. The abbot was told that his flock were wont to steal out in the night time, and so he would frequently

come round after dark and count them; but as he always found nine in a row, he would retire to his hut in the court, as satisfied as if it were the court he had been accustomed to. And yet four of the scamps used to leave nightly, while the others arranged themselves so that nine were still in each row (see the third time, Unfaithful Knave). Encouraged in their trickery, the four who had had an outing brought back four knavish friends (show the knaves, and distribute them with the others, as in the first time, Unfaithful Knave); and as they counted nine each way, the abbot was not informed. The next night, four more (show the aces) were smuggled in, and again deceived the abbot (arrange as the thirty-two bottles were placed). And again, four boon companions were introduced, without causing discovery.

	9 cards	
9 cards		9 cards
	9 cards	

And even when the twelve unauthorized intruders had decamped, they carried off one of the monks with them, without the unfortunate old gentleman perceiving the goings-on, and goings-off, thus. "—

5 cards		4 cards
		
4 cards		5 cards

It is sometimes called **THE BLIND ABBESS AND HER NUNS.**

**To Throw Thirty-one with a Die before your Antagonist.**

Propose to make thirty-one before your opponent, though each may begin with whichever face of the die he pleases. You throw, and place then the die with its face 3 up. If the other shows 6, that will make 9, so add 2 to make 11, and show 6 = 17. If he shows 6 = 23, you put 1 to make 24, and whatever he may show, you will be game before he is.

**To Tell which Hand holds an Odd or Even Number of Cards or Dice.**

The number in the right hand is to be multiplied by an even number, suppose two, and the left by an odd number, suppose three. Add the two sums: if the total is odd, the even number is in the right hand, and the odd in the left, and *vice versa*.

*Proof.*—Let us suppose 8 in the right hand, and 7 in the left:  $8 \times 2 = 16$ , and  $7 \times 3 = 21 + 16 = 37$ ; an uneven number. If it had been 9 in the right hand, and 8 in the left:  $9 \times 2 = 18$ , and  $8 \times 3 = 24 + 18 = 42$ ; an even number.

**To Guess the Points of each of Three Dice thrown on a Table and arranged in Order.**

Double the number of points of the first die on the left, and add five; bid the party multiply the whole by five, and add the number of the middle die's spots; multiply all again by ten, and to this product add the number of the last die. From this sum subtract two hundred and fifty (250), and the remainder will be the points of the three dice.

**The Counter Trick.**

You ask a person to count out 18 counters, or coins; meanwhile, you conceal 6 between your right thumb and forefinger. You inquire if the gentleman has the 18, and, on his reply, pick them up, and in so doing add

the 6 you had hidden, and put the whole into the person's hand—being 24. Ask of him how many he would like to be in his hand between 18 and 24. On his answering 23, for instance, say, "Give me 1, and, remember, that leaves you 17"—for you make him believe he had but 18 given him. Now take some counters from the purse, and reckon 18, 19, 20, 21, 22, and 23, which you pretend to put into your left hand, but, in fact, retain in the other, while affecting to make them pass to join the 17. You open your left hand, showing that the half-dozen had gone, and bid the person reckon his counters, and the amount will be the 23 he wished for. He puts them down; and, in your picking them up, you add the 6 you concealed, and put them all away in the purse. Or, you return them all to the person, and ask him how many he would like to have between 23 and 29. Suppose he replies 26, you tell him to give you 3; then from 23 to 26 you reckon 3, which you pretend to throw into his hand as before; on opening it, he finds truly 26. You take them, and, adding the three left in your hand, put them all away together. If, instead of the 23 counters supposed, the person had chosen to wish for 19, the key is, for you to ask for as many counters as are between the number the person asks for and 24; that sum will be the number wished for.

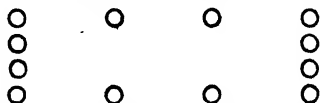
### How many Counters have I in my Hands?

An equal number of counters being in each of a person's two hands, you can tell how many he has altogether by this means. He is to put from the right into the left hand a certain number of counters, less than he has in either hand. Then from the left hand, to which he had added these, let him take just as many as were remaining in the right hand. There will now be in the left twice as many as the number he was ordered to carry back to the right. Ask by how many the counters in the left hand outnumber those in the other, and you will then know how many he holds in his right hand. Lastly, add the contents of both hands to learn the entire amount.

*Example.*—Supposing twelve counters originally taken in each hand, and seven put from the right into the left, five are to be returned, because that number was left in the right hand. You are sure that the left hand then holds fourteen counters, the double of the seven you ordered back. You then ask by how many the number in the left hand is above that in the other, and being answered four, you subtract four from fourteen. The remainder, ten, you add to fourteen, and the result, twenty-four, was the total of the counters taken at first.

### The Square of Counters.

Twelve counters forming a hollow square, four to a side, are to be arranged to count five to a row.



*Explanation.*—Form the square of three on a side, and put the extra four one on each of the corner ones.

### To Tell a Number Thought of.

The person who selected a number is to double it, add four, and multiply the result by five; add twelve to this product, and multiply all by ten; then subtract from the total 320 (three hundred and twenty). Ask the remainder, from which you strike off the two last figures, or ciphers, and the first will be the number thought of.

*Example.*—Three being the number thought of, its double is . . . . . 6  
 Adding four, the total is . . . . . 10  
 Multiplying  $10 \times 5$ , there results . . . . . 50  
 Adding twelve, the amount is . . . . . 62  
 Which, multiplied by ten, makes . . . . . 620  
 Subtract . . . . . 320

And the remainder is . . . . . 300

Striking out the two last figures, the 3 (three) which heads them is the number thought of.

### A Numerical Puzzle.

You write down three amounts on paper, and say to the party, "Here you see three very different lines of figures, and very disproportionate, and yet I can divide them among three persons without altering the amounts. In one adding up, I shall prove that each one's share will be the same, and they will not be much the richer for it."

*Example.*

$$5134122 = 18$$

$$61254 = 18$$

$$7218 = 18$$

You can vary the problem widely, but always observe to write the figures so that the sum of them in each line will not exceed the share you mean to give each person.



### The Marvellous Addition.

There is presented to the company a paper on which are four rows of five spaces, or dots, with a stroke under and a line of five figures,—

•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
—	—	—	—	—
19	9	9	9	8

The party is to put down any figures he pleases on the first and third rows, one figure to each space.

*Example.*

3	7	2	1	0
•	•	•	•	•
6	2	7	8	9
•	•	•	•	•
—	—	—	—	—
19	9	9	9	8

On the instant, you write two more lines of figures between the others and the line at first set down, and on adding all four, the amount will be that which was fore-written,—

3	7	2	1	0
2	9	6	0	7
6	2	7	8	9
7	0	3	9	2
<hr/>				
19	9	9	9	8

*Explanation.*—The last line, written beforehand, was only the amount of two rows of five nines, as shown:—

9	9	9	9	9
9	9	9	9	9
<hr/>				
19	9	9	9	8

Therefore all the art consists in supposing that the challenged party should write two lines of nines; and, had he done so, the addition would have been then and there complete; but as he naturally writes something else, you have merely to set down those that will supply his deficiencies, to make his figures equal each to nine.

*Example.*—If the first figure of the first row is 3, and 2 of the third row, begin the second row with 6 and the fourth with 7, by which means the four lines will be equivalent to two rows of nines, and the previously declared amount be verified.

*Observations.*—The total is all nines, except the first and last figures, whose amount is nine. Again, the same method holds good to supply three rows to three other rows, to have an amount also in nines, except the first and last figures, which will be 2 and 7: in four rows written and four to be added, the first and last figures will be 3 and 6.



### Peculiar Properties of the Numbers 37 and 73.

The number 37 being multiplied by each of the numbers in the arithmetical progression 3, 6, 9, 12, 15, 18, 21, 24, and 27, all the products will be composed of three similar figures, and the sum is always equal to the number by which 37 was multiplied.



*Examples.*

37	37	37	37	37	37	37	37	37
3	6	9	12	15	18	21	24	27
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
111	222	333	444	555	666	777	888	999

The number 73 being multiplied by each of the aforegiven progression, the products will terminate by one of the nine digits—1, 2, 3, 4, 5, 6, 7, 8, 9, in a reverse order.



To Divide a Number in Two and have no Remainder.

Let us suppose 8888. Run a line through the middle horizontally, and only ciphers will be left.

### A Pellicate Distribution.

Twelve bouquets have been brought in to the company, but there are thirteen ladies in it. The host really is not sorry to vex one of them, but he dare not reveal his ill-will, and he says that Chance shall make the decision. Consequently, he places the ladies in a ring, letting them take what positions they themselves prefer. He reckons from one to nine, and makes the ninth lady leave the circle, giving her a bouquet; and it is found that the eleventh lady, including the one by whom the host began, remains the last, and has no share in the distribution. If there had been twelve ladies for eleven bouquets, the host would have had to commence by the one whom he wished to exclude.

To Divide equally Eight Pints of Wine among Three Jars holding severally Three, Five, and Eight Pints.

Call the large jar A, the five-pint one B, and the small one C. Pour from A, which is full at commencement, as much into B as it will hold, and fill C from B; then pour out of C into A, and the remainder in B, which is two pints, give to C. Now pour into B the wine in A, and from what is in B fill up the rest of C; that is

one pint added, as there is already two in A. There is then left four pints in B, which will be just half.



### **The Bottle of the Four Elements.**

Wind silver or gold wire, or paste thin strips of coloured paper, around a long bottle, so as to divide it into five parts. For Earth, coarsely grind some black glass or enamel, of which the weight will send it to the bottom, to represent the heaviest of the elements. For Water, the next in weightiness, take oil of tartar, liquefied by being exposed to damp air, and mixed with a little very fine blue powder to tinge it azure, like the sea. For Air, use brandy, also a little blued. For Fire, distilled rock-oil, coloured with Brazil wood. Place into the bottle thus: 1st, the black glass; 2nd, the burnt tartaric acid; 3rd, brandy; 4th, rock-oil. Cork with a glass stopper, and seal with gum mastic. Shake it up well, and the contents will intermingle as a chaos; but, when quiet, all the substances will settle orderly into place, the lighter bodies letting the heavier ones glide through them.

### **To Show Live Earth-worms in a Bottle, after only putting in Mould and Water.**

Have a large-mouthed glass jar. Hollow the cork out inside, so as to contain some raspings of horn and cuttings of catgut, and cork them in with a lump of sugar. Put into the jar a little mould, and some warm water; shake the jar, and the warm water will dissolve the sugar, and, when it falls, the horn and catgut will drop to the bottom, where they will twist and curl up in the warm water like earth-worms.

### **To Lift a Bottle, Full or Empty, with a Straw.**

Take a long sound straw, and bend it, between the knots, so as to form an acute angle. Thrust it, angle down, into a bottle, so that the longer end will be out-

side, and the other catch the inside of the upper swell entering the neck. The force being distributed in straight lines, the straw is not bent, and there is nothing to compress it.

### The Surprising Bottle.

Let your tinman make you a bottle double all around, in which "jacket" you can put wine. Where the bottom of the bottle goes upward, let a hole be made, so that the bottle is merely a hollow wall containing a tube. When you wish to perform the trick, produce the bottle, filled with good wine, and set it on your table, upon a hole in it corresponding with that in the bottle's centre. You must have a confederate under the table, to thrust a lighted squib into the bottle, which will spout fire. The moment the powder has burnt itself out, take up the bottle and pour out wine to the company.



### The Ascent of Aquarius.

In a four-ounce phial put one ounce of coloured water. Through the cork run a glass tube, nearly going down to the bottom, and cemented in the cork air-tight. Put the instrument on the hob, or in hot water, and the air in the bottle will push the water before it, to try to get up the tube out of the bottle.

### The Descent of Aquarius.

Take a small phial with a narrow neck, about a fifth of an inch in diameter, and an earthenware jar an inch or two higher than the phial; also a small funnel. Fill the phial with wine, and stand it in the jar full of water above the mouth of the phial. Instantly the wine will rise out of the phial in the form of a small column on the surface of the water, while the latter, at the same time, will rush down into the phial and replace it. The explanation lies in the fact, that watery particles being heavier than vinous ones, the former naturally drives the latter to the surface of the water.

### The Bottled Egg.

Having a bottle large enough to hold an egg, but with a mouth too small to permit its entrance in its natural condition, you have merely to soak it in strong vinegar until the shell is softened, so that you can squeeze the egg into the neck. Cold water poured on it will restore it to its original hardness. As vinegar is often adulterated, and may not be strong enough to do this work reliably, add to two table-spoonfuls of vinegar, one of acetic acid.

—□—

### A Liquor Shining in the Dark.

Cut up a piece of phosphorus the size of a pea into many bits. Put it into a small earthen pipkin, with half a glassful of very clear water, and boil it at a slow fire. Have ready a long clear white glass phial, with a glass stopper fitting it tightly, and put it into boiling water: take it out, empty it, and instantly pour into it the phosphorus water, covering the stopper with gum mastic, to make it air-tight. Throw away the remaining phosphorus water at once, as it is poisonous. This water in the phial will be luminous for many months in a dark place. Be careful not to shake the bottle; but if, in warm, dry weather you shake it, very brilliant flashes will dart about inside the glass.

### To Convert a Bottle into a Mitrailleuse.

Take a very thick black glass bottle, without a flaw, and into it put three and a half ounces of iron filings, two ounces and a quarter of oil of vitriol, and half a pint of water. Cork the bottle until it feels warm, when remove the stopper and apply a bit of lighted paper, and a detonation will be heard. You can repeat this feat some twenty times consecutively.

—□—

### To Pick a Coin out of Water without Wetting your Hand.

Pour a little water in a shallow bowl. Drop a coin into it, and offer to take it out with your fingers without

wetting them. You conceal in your hand some lycopodium powder (to be had at a herbalist's), which you will sprinkle on the water, when it will cling to your hand and keep off all moisture; shake your hand a little after drawing out the coin, and the powder will fall off.



**To Change One Coin put in a Plate into Two, One of them Larger than the Other.**

Fill a glass goblet with clear water, and into it put a shilling or a florin. Put one hand on the glass and the other under a plate set upon it, and quickly turn the two upside down, so that the water cannot run out, on account of the air having no time to enter. The result will be, that whoever looks at the coin, which will be on the plate, will see it appear twice its natural size, while a little higher than itself will be seen its image, but about the real coin's size, which will make persons, ignorant of the laws of refraction, imagine there was a shilling and a half-crown put in the glass. On ~~lifting~~ up the glass, that illusion will cease.



**To Hold a Glassful of Water Upside Down without Spilling.**

Fill a glass brimful of water or other liquid, lay a thin card over it, and on the card press a plate or a piece of glass. Turn it all upside down, and you can hold the glass up by the stem without losing a drop of water. It is the weight of the air which presses on the paper outside more than the water within, and sustains it. When the water soaks through the card it will force it off abruptly.



**To Make Water Rise from a Saucer into a Glass.**

Pour water into a saucer, then light a piece of paper, which you put in a wine-glass, and on clapping the glass down into the saucer, the water will be seen to rise into it.

### To Change the Colour of Liquors in various Bottles.

All your bottles are set in a row on a table against a partition, behind which is your confederate, who can pour certain liquors, as directed, into vases there, communicating by means of a secret pipe with the bottles in exhibition. 1st. To change yellow to green. In the bottle, tincture of saffron; your confederate, at your signal, pours tincture of red roses into the vase corresponding. 2nd. Red to blue. *Bottle*, tincture of red roses; *vase*, spirits of hartshorn. 3rd. Blue to crimson. *Bottle*, violet dye; *vase*, spirits of sulphur. 4th. Blue to violet. *Bottle*, violet dye; *vase*, a solution of copper. 5th. Brown to yellow. *Bottle*, brandy; *vase*, diluted vitriol. 6th. Red to black. *Bottle*, tincture of red roses; *vase*, diluted vitriol. 7th. Green to red. *Bottle*, solution of copper; *vase*, tincture of *cyanus*. 8th. To take away and restore green. *Bottle*, tincture of roses; *vase*, first change, spirits of nitre; second, oil of tartar. 9th. Red to black, and red again. *Bottle*, tincture of roses; *vase*, first, solution of vitriol; second, oil of tartar. 10th. To make a colourless liquid turn black, become clear, and again turn black. *Bottle*, infusion of galls; *vase*, first, solution of vitriol; second, oil of vitriol; third, oil of tartar.

### To Make a Colour with Two Colourless Liquids.

Infuse a pinch of rose-leaves in spirits of wine, but not so strong as to show any tint. Pour in a few drops of spirits of nitre, also a colourless liquor, and it will turn it red. For orange, pour a few drops of lime-water on a solution of corrosive sublimate (*note*, deadly poison), and you will have a lovely orange hue. For yellow, oil of tartar on a dissolution of mercury. For black or grey, a solution of salts of saturn to a solution of vitriol.



### To Change the Colour of a Liquid Several Times.

Pour Brazil wood dye into a glass of water, and it will look like wine; pour this glass of red water into

another glass, which has been rinsed out in vinegar, and it will turn yellow. Pour out all but three *fingers*, and add water to the remainder, which will turn it grey. Add more water till it is white. A drop or two of ink will make it a blueish grey.



### The United Enemies.

#### *To Mix Wax with Water.*

In a new glazed earthen pipkin put one ounce of spring-water and two ounces of good white virgin wax, secretly adding, by means of a hollow wand or spoon, apparently only to stir the mixture with, a large pinch of salts of tartar. When warmed on a fire, stir it with your stick, and the wax will readily melt into the water. The longer you leave it on the fire, the more liquid it will become. This pomade is very good for the skin, rubbing it in with a towel.



### Perpetual Motion.

Put into acid—even strong vinegar will do—an *eye-stone*, i.e., the calcareous stone known as lenticular, or double convex. It will go round and round without cessation.



#### *To Make Wine Float on Water.*

Half fill a glass with water, put in a piece of the crumb of bread as big as a walnut; on it pour wine, which will keep on top without intermingling. Or, over the glass, half filled as before, place a piece of thin muslin, and gently strain the wine or brandy through the muslin, when it will remain on top of the water.

### Mock Lightning.

To play a practical joke on some one, prepare a small, dark room, without many windows to let in light or air, by burning spirits of wine and camphor in a bowl, until

they have all been consumed. Whoever enters the room with a light will be saluted by a flash of lightning, without either he or the room being injured in the faintest degree.

### To Fireproof your Hand.

Equal parts of oil of petroleum, rock-oil, fine lard, mutton tallow, and quicklime are to be mixed together until forming one substance. Distil it over burning charcoal, and save the water which results. It can be burnt on the hand without any harm being done.

### To Make a Party Look Hideous.

- Dissolve salt and saffron in spirits of wine, in which soak a wick, and lighting it where no other lamps are burning, fair people will look green, and the red of cheeks and lips become deep olive-green.

### Burning of the North Pole.

To make inflammable ice, melt large lumps of spermaceti in distilled rock-oil in a vessel over a slow fire. Put the liquor in a cool place, and it will set like ice. If it is very warm weather when you perform the feat, put the vessel in cold water, and when the compound begins to thaw out, pour over it strong spirits of nitre, when all will burst into flame and be consumed quickly.

### A Lamp to Burn although Trundled on the Floor.

By mounting three rings around a lamp, each on two pivots set in the next outer one, the lamp, like a swinging light for shipboard, will always keep erect through all attempts to upset it by moving its outer circles.



**The Floating Beacon.**

Fasten to the end of a half-burnt candle a leaden counter of its own diameter, and put it gently into water. It will swim erect, and, if lighted, will burn to the very end without sinking.

**Exploding Pastilles.**

Make out of the composition used for the perfumed lozenges burnt to scent a room, balls large enough to hold a pea, and, while damp, fill these cavities with gun-powder and cover them over. Turn them upside down, so that the damp will not neutralize the powder in their drying. When they are put in a chafing-dish their explosion will cause an amusing alarm.

**Incombustible Substances.**

Paper dipped in alum-water and dried, two or three times, will be found to defy the action of the flame of a candle.

**To Blanch and Restore a Rose.**

Sprinkle some powdered sulphur on a charcoal fire, and a full-blown rose held in the fumes will be bleached. Dip it in vinegar-and-water and the tint will return.

**To Copy a Seal.**

In magical performances, it is often necessary to open a sealed envelope, and yet leave no evidence of your having broken the wax. You take an impression of the seal by smartly striking a piece of soft lead on it. Break the seal and read the enclosure; fuse the wax again by directing the tube of a blow-pipe on it, and seal with the lead reverse. No trace will remain of the seal having been tampered with.

**Magic Writing.***Letters that will Come and Go at Command.*

Write on a mirror with French chalk, wipe it with a handkerchief, and the letters will vanish, but can be called into view by breathing on them, at a considerable distance of time.

**To Write a Letter Five Miles off.**

Make an invisible ink by dissolving in aqua regia as much fine gold as it will take up, and dilute this with water. On several small slips of paper, not too white in colour, write at the top a question of any nature, each different, and with your invisible fluid a fitting reply beneath. This will dry in out of sight. Let a person select one question-slip, suitable to his wishes about the future, and bid him take it home with him, saying, that in the night-time you will, by your magical powers, write the answer to him, so that he will read it on rising in the morning. He will no doubt place the paper in a dry place, and the writing will be legible. Keep the papers out of a strong light.

**To Make a Cross in the Hand with one Stroke of the Pen.**

With a quill and ink, make a line across the crease which runs over the palm from the fore to the little finger. Let your hand be covered over with a hat, and while hidden, close the hand, as if to make a fist of it. Open, and on the removal of the hat a cross will be found.

**The Magic Nosegay.***A Trick with Sympathetic Fluids.*

Have an artificial florist make you some flowers with white parchment-leaves, and with the blossoms of white cotton or canvas, such as roses, lilies, jonquilles, &c. Dip the roses into the red ink (the recipe follows),

the jonquilles into the yellow, the others into the violet, and the leaves into the green. Dry them all, and make bunches, which will all appear colourless. The same night, or longer afterwards, dip them into a vase filled with the sympathetic fluid, and they will come out in their various hues. Pretend that the flowers were originally coloured, but by magic were blanched, as well as now restored to their pristine beauty.



### To Make the Sympathetic Inks.

*Yellow.*—Steep marigold blooms, for a week or ten days, in strong distilled white vinegar; strain, and bottle. Keep well corked up.

*Red.*—Spirits of nitre, diluted with ten times its quantity of water.

*Violet.*—Press out the juice of citron; strain, and bottle.

*Green.*—Dissolve in a little river-water the whitest and driest salts of tartar to be had, and bottle it.

### To Make the Sympathetic Fluid.

All these will require the following liquor to bring them out: Take a sufficient quantity of violet or pansy flowers, bruise them in a mortar, and add water; strain and bottle the juice. By washing the inks used upon paper, silk or canvas, with this sympathetic fluid, the writing will be legible.

### The Magic Oracle.

Write on slips of paper questions in crimson ink, and underneath a fitting answer, with ink made as follows: Zaffer digested in aqua-regia, and diluted with water; invisible except under the action of heat, when the writing is legible, and of a green colour. By several of the cards with a certain question having on them different answers, the trick will be less likely to be suspected. Construct a box, ornamented with shells and rock-work,

so as to justify its title of the "Sybil's Cave," inside of which can be put a hot iron plate, so as to warm the interior considerably. Having let the audience select their queries, take and put the chosen slips into the cave. Talk about the marvellous abilities of the Lady of Fate, whom you playfully suppose to be within as your secretary, and presently withdraw the slips and show the written answers. But do not let them be too long out of your hand, for the letters will disappear as the paper grows cold.



### **The Tree of Mars, or Metallic Vegetation.**

Dissolve in spirits of nitre, rather strong, as much iron filings as it will take up, add tartaric acid in solution, poured on gradually. There will be a strong effervescence; at the end of which the iron, instead of sinking to the bottom of the vessel, will rise along the sides, coat its interior, and shoot off a number of branches piled on top of one another, often falling over the edge of the vessel, and covering its exterior with all the appearance of a plant.

*Note.*—The best vessel for the experiment is a large glass with a stem, set in a saucer.

### **Tree of Diana.**

In five ounces of aqua-fortis, dissolve four ounces of silver filings or scales, and a quarter of an ounce of mercury. Put it in a half-pint of common water, and stir it well to mix it all. Keep well stoppered up. If, after putting a little amalgam of silver and mercury, the size of half a pea, at the bottom of a small phial, you pour upon it about an ounce and a quarter of this liquor, there will be seen to shoot from the little ball of amalgam, tiny branches, which will sensibly enlarge, to form a miniature tree or shrub in silver.

### **Two Solids become a Liquid by mere Touch.**

In separate crucibles melt two ounces of bismuth and four ounces of lead. Pour each into her cruci-

## **GENERAL TRICKS.**

bles containing each one ounce of mercury. In cooling, these alloys will be solid ingots; on rubbing them together they will liquefy.



### **To have Natural Flowers in Winter.**

Cut off the best-formed buds about to open with scissors, leaving their stalks a quarter of an inch long; cover the cut with wax. Let the buds dry, wrap each up separately in very dry paper, and put away in a box in a dry place. At any time during the winter you can take them out, clip off the waxed stem, and on dipping them into water, in which has been put a little salt, or nitre, they will bloom.



### **To Tell if a Person is in Love.**

At a farrier's, or elsewhere, procure a piece of horn shaving as thin as paper, an inch long by three-fifths of an inch wide, and cut it into the shape of a Cupid as generally represented, *i.e.*, of a plump child. Make a similar figure out of parchment, paper, or silk. Put the figure of horn in a person's hand, and the heat will make it curl up and move about, while the other will not stir.



### **To Make a Figure which will Raise itself without Machinery.**

Shape a small figure of pith, bedecking it with clothes by gumming on it silk floss or other light stuff, and glue on the base of it half a marble or half a leaden bullet, fastened by its flat side. However you may knock the little man about, he will always rise to his feet.

### **To Imitate the Song of Birds.**

Take a pear-tree leaf, an inch long and half an inch thick. With the thumb-nail dig a semicircular piece out of the middle, so as to leave only the white inside extremely thin, covered on the uncut side by the outer

skin. This opening will be in the shape of a half three-penny piece; if you have not cut it clean out, you will only be able to draw from it the croaking of a raven. Double up the leaf and apply it to the palate, the bared part to the swell at the back of and above the roof of the tongue, not towards the hollow, and try to pronounce the following syllables, to imitate the nightingale: "Eu-oo, eu-oo, eu-oo, eu, eu, eu, eu, tshee, tshoo, tshee, tshoo, tshee, roo, roo, eu, eu, eu, roo, shee!"

### Salamander Paper.

If you wrap a nicely-rounded bullet in paper as smoothly as possible, you may hold it over a lighted lamp, and see the melted metal fall drop by drop without the paper burning.

*Explanation.*—The heat passes through the paper, since paper is woven, and therefore has interstices; but meeting with the obstacle of the dense lead, it fuses the metal first.



### To Change Steel into Copper or Brass.

Dissolve in a glass dish one ounce of small scales of copper, cleaned by heat, in three ounces of aqua-fortis. It will be ready in three or four hours. When cold, a knife-blade dipped in it will be covered with copper in an instant.



### A Distorted Figure seen Well-proportioned from a certain Point of View.

Write or draw on thin white cardboard any letters or design you fancy, prick the outline all round, hold it at an angle to another piece of white cardboard or paper, placed horizontally, and let a light shine through the pricked outline, which will give distorted forms. This done, put aside the light and the perforated cardboard, and by placing your eye where the light had been, you will see the second drawing take a regular form.

**To Restore Burnt Ribbon.**

Get two yards of tape or ribbon, cut it in half, and damp one piece with a sponge. Roll this up so as to be concealed in the palm of the hand, between the ball of the thumb and root of the forefinger. Let the audience cut up and burn the duplicate. Sprinkle the ashes in your hand with water, which you assert to possess restorative powers, and gradually draw forth the secreted ribbon.

**To Divide a Coin without Cutting it.**

Stick three pins on a board thus  $\therefore$ , on the heads of which you lay a silver coin. Heap under and upon it some flowers of sulphur, to which you set fire. When it has burnt out, you will find a surface of metal off the coin on the upper part.

**To Prove that Twice Nothing is of Value.**

Set one cipher on another, and they will form the figure 8.

**To have Ice in Summer.**

In an earthen bottle filled with boiling water, put two and a quarter ounces of saltpetre, and five drachms of Florence iris-root powder, cork it up tightly, lower it at once into a shallow well, where it can be left under water two or three hours, at the end of which period the water in the bottle will be converted into ice. Draw up the bottle, and break it, to get the block of ice out.

**A Practical Joke on a Linendraper.**

Call for the third and a sixth of a yard of ribbon or tape, and he will measure off each part by itself, when he might just as well have cut off half a yard at once, as the yard, having three-thirds in it, one-third and a sixth is three-sixths, or one-half of three-thirds.

## A Comical Dilemma.

There came to a river-side a wolf, a goat, and a cabbage. The ferry-boat was so small that only the man and one of these queer travellers could occupy it. Now, how are they to get over dry-footed, without the wolf eating the goat, or the goat devouring the cabbage?

*Answer.*—The ferryman takes the goat over first; returns for the wolf, which he leaves on the other side, while he takes back the goat. He crosses with the cabbage; returns alone for the goat, and so the wolf has never been left alone with the goat, nor the latter with the cabbage, except when the man was by.

*Variation.*—Call the parties a fox, a goose, and a bag of corn. Another is to tell the story of its being three gentlemen, each with a servant, who come to a river where the ferry-boat will only carry two persons, while none of the gentlemen must be left on the bank with a servant not his own, using Kings of a pack for gentlemen, and Knaves for the servants.

### To Break a Stick Laid on Two Glasses full of Water, without Breaking them or Spilling the Water.

Place the two wine-glasses, filled up with water, on a very level table, or, better still, on two benches of the same height. Lay the stick on the edge of the

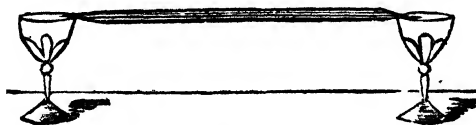


FIG. 1.

glasses, one end on each, and strike it in the middle smartly with another stick. You will break it in halves without injuring the glasses.

*Explanation.*—The stick B, a thin one, tapering to a point each way from the centre, has its ends on the edge of the glasses, A A.



### To Boil without Fire.

Throw some brass filings into a bottle containing some aqua-fortis, and a great effervescence will occur, with such a heat that your hand would be burnt against the bottle.



### To Make a Fowl, while Roasting, Turn the Spit.

Spit the bird with a green rod of walnut-wood, and the bird and spit will turn together, by the action of the heat in drying the wet wood.

### To Balance a Stick on the Finger, without Fear of its Falling.

Drive into the end of a stick, from opposite sides, two knives. As they act as counter-weights, the stick may be tipped in any direction, but still will recover itself.

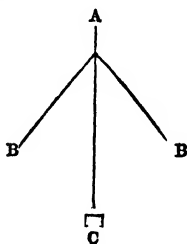


FIG. 2.

*Explanation.*—The stick A has two knives, B B, stuck in it near the upper end on opposite sides. The stick is poised on the tip of the finger c.

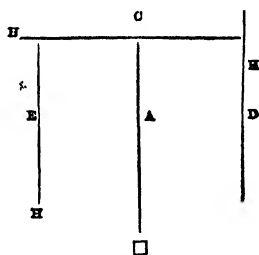


FIG. 3.

*Explanation.*—The stick A is poised on the finger-top, B. On its upper end is balanced the knife c; into its handle H, the knife E is stuck. In the same way the point of c runs into the handle H of the knife D.

## PART II.

### TRICKS WITH PLAYING-CARDS,

*Performed by Sleight-of-hand.*

**I**T is unknown where playing-cards were first invented, but in spite of the claims to originating them advanced by France, Spain, and Germany, the greater weight of the evidence and reasonable supposition points to an Oriental source. Where chess was first known, its satellites, cards, may well have been invented.\*

The four suits of cards in Europe were made to represent four classes of society. Spades (in Spanish, *spado*), swords, or spear-heads, the sword-bearers, or nobility. Hearts (in French, *cœur*), perhaps the chœur or choirmen, or clergy. Diamonds, citizens or tradespeople. The Clubs, the three-leafed clover (in French, *trèfle*—trefoil), though the Spanish have really clubs figured on their cards. The Knaves were the valets or servants of the knights. The Kings and Queens were often represented as historical characters.



#### The Amateur's First Lesson.

I. Never give any warning of the trick you are about to perform, lest the spectator, prepared for the effect

\* See Chatto, Taylor, Singer, Breitkopf, &c., on the "History of Playing-cards."

which you desire to produce, should have sufficient time to divine the cause.

II. When possible, be prepared with several methods of performing the same trick ; so that if any spectator should discover one, you may be able to employ another and totally different mode of arriving at the same result, thus leading the audience to believe that no discovery had really been made.

III. Never do the same trick twice over ; in doing so you violate the above first rule, since the spectators will be prepared for the proposed result.

IV. If requested to repeat a trick, never refuse point-blank to do so, as this would excite suspicion of the slenderness of your resources ; but tell the audience you will renew it in another form, which will, of course, prevent them from insisting further. You will then perform one which has some direct or indirect connection with it, and declare that it is the same trick, but performed under a different aspect. This artifice rarely fails of producing a good effect.

V. If you continually perform only sleight-of-hand tricks, which depend entirely for their success on the nimbleness of the fingers, the spectators, continuing to see the same gestures, may be educated at last thereby, and comprehend your actions. Therefore, perform in succession tricks of sleight-of-hand with apparatus, and in natural magic, so that the spectator may be puzzled by seeing constantly nearly the same effects, though produced by different causes.

VI. Whatever means employed, manage, by some artifice, to induce the spectators to fancy, naturally, and without apparent effort on your part, that you are employing some other. If, for instance, it is a trick with confederates or apparatus that you are showing, endeavour to make them believe that it is no doubt effected by mere dexterity. If, on the other hand, it is a sleight-of-hand trick, pretend to be awkward about it.

VII. If you are performing before a small circle composed of good old souls, too indolent to take the trouble of thinking, there will be no harm in exhibiting old tricks as well as new ones—simple as well as complicated. But if you are to amuse a large party, among

whom may be found, most probably, some well-informed people, be careful not to give, as novelties, tricks already explained in print.

VIII. If you are unable to invent any tricks, at least try to discover novel modes of performing them, so as to give even old, well-known deceptions an appearance of freshness from the new aspects under which they are exhibited.

IX. However startling your performances, be careful to avoid arrogating to yourself any marvellous or supernatural powers. Extraordinary feats, however strictly in accordance with the laws of nature, will be quite as amusing to the educated and intelligent as the miraculous would be to the illiterate.

X. Never do a trick without being prepared with replies to any rational objections that may be made to it.

XI. Avail yourself artfully of every accident, and of the different degrees of credulity that will come under your observation. Opportunities for success occur constantly, but only Sense and Tact know how to profit by them.



### *Particular Principles.*

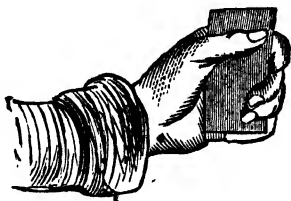
#### **To Make the Pass\* with Both Hands.**

To perform Card tricks with neatness and dexterity, it is indispensable to know how to "Make the Pass." "*Making the Pass, or Shifting the Cards,*" is the technical term for shifting a card from the middle to the top or bottom of the pack, or *vice versa*. This is only to be acquired by practice, as it is purely a mechanical operation. It is very difficult to describe this movement, but, by the aid of the following rules and illustrations, we think we have made it quite easy.

1st. To make the pass with both hands, first hold the

\* "Making the Pass" is, in French, *Sauter la Coupe*, i.e., making the cut card appear or leap into prominence.

pack in the left hand, and cut it into two equal parts, putting the forefinger and the little finger between them (or, with only the little finger between).



c FIG. 4.

2nd. Put the right hand on the pack, slightly compressing the under half between the thumb and middle finger

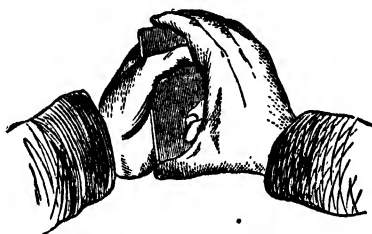


FIG. 5.

In this position the upper part of the pack will be held tightly between the forefinger and the little finger of the left hand and the other two fingers of the same hand.

3rd. Thus holding the under portion with the right hand, without pressing the upper division with it, try to withdraw this latter with the left hand, and slip it underneath swiftly and noiselessly. You will find some difficulty in it at first, but an hour's daily exercise for a week ought to give you perfect facility. Observe that immediately after the pass, the cards may and ought to have taken different positions, according to what you may require.

1st. They may be united and make but *one* pack, as in Fig. 6.



FIG. 6.

2nd. They may be crossed and placed sloping, the one on the other, as in Fig 7.

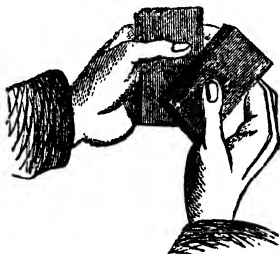


FIG. 7.

3rd. They may be separated, one portion in each hand, as in Fig. 8.

4th. They may be separated by the forefinger of the right hand, and be both in this hand.

5th. The two portions may be united in the left hand, in such a manner that the faces of the cards in the under packet may be turned upwards, so that the portion A is entirely covered by packet B (see Fig. 10), while both are held in the left hand.

It is necessary to practise all the positions, in order

to avail yourself of them in the manner we are about to show; for, before you attempt any of the tricks that

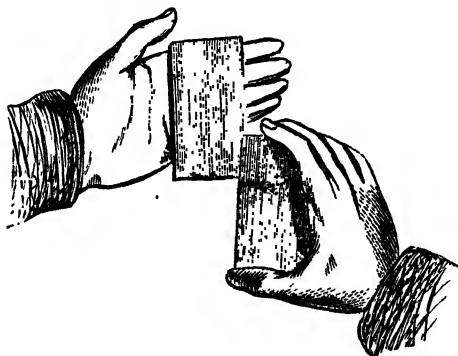


FIG. 8.

depend on *making the pass*, you must perform it so, dexterously and expeditiously, that the eye cannot detect the movement of the hand while practising before a

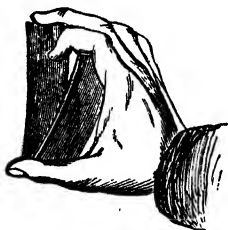


FIG. 9.

looking-glass; or you may, instead of deceiving others, expose yourself. It will, perhaps, be amusing to those of our readers who may never essay to perform a trick with cards, to study this article on *making the pass*, as it must be gratifying to know the method by which sleights are performed by those persons skilled in such manœuvres, who publicly exhibit them to the astonishment of the spectator, that when they recognize them at

any of these exhibitions, their eyes may not be in danger of deceiving their judgment.

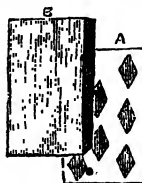


FIG. 10.



### To Make the Pass with One Hand; or Single-Handed Pass.

1st. To make the pass with one hand, first hold the cards in the left hand, separating them into two portions, which you do by securing the upper one between the joint of the thumb and that part of the palm below the first joint of the forefinger, holding the lower packet equally tight between the same part of the palm and the first joints of the middle and third fingers.

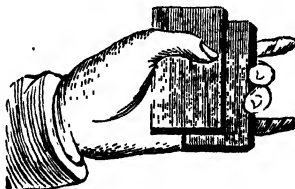


FIG. 11.

2nd. Pass the fore and little fingers under the lower portions, to grip them between them and the two other fingers.

3rd. Keeping the thumb in the same position, spread out the four fingers to give the under portion the position seen in Fig 13.

4th. In this fourth position the cards of the under portion are turned upside down; that is, the faces are uppermost; but they are still held between the fore and



little fingers on one part, and the middle and third fingers on the other, underneath.

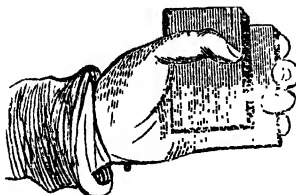


FIG. 12.

5th. Move the thumb a little, to release the upper portion, letting it rest on the fore and little fingers ;

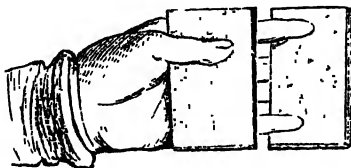


FIG. 13.

and, at the same time, bring down the under packet upon the thumb.

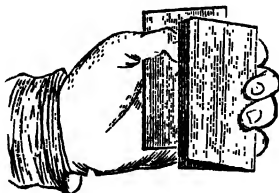


FIG. 14.

In this fifth position, the under portion becomes the upper, and all cards face downwards.

6th. Draw back the thumb from between the two packets ; slip it above them, pushing both towards the base of the thumb, so that the two portions become the united pack again, except for being still separated by

the fore and little fingers. It only then remains to open out these fingers for the cards to make but one packet.

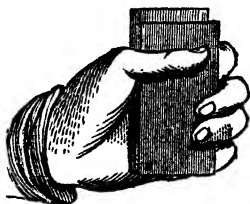


FIG. 15.

*Observe.*—It would be a great mistake to suppose that as much time is required to execute this feat as to explain it. You must exercise your fingers, and practise the trick until you can go through the six positions just described rapidly and instantaneously; until, in fact, you can make the pass with one hand at least twenty times a minute.



**The False Double Shuffle; or, Four Methods of shuffling Cards in such a manner as always to keep one particular Card at the Top or Bottom of the Pack.**

In showing tricks with cards, the principal point consists in shuffling them quickly, and keeping one certain card either at the bottom, or in some known position in the pack, four or five cards from the bottom; for by this you may seem to work wonders, since it is easy for you to see or take notice of a card, which, though you are perceived to do it, will not be suspected if you shuffle them well together afterwards.

The false double shuffle may be divided into four kinds. The first consists in really shuffling all the cards, except the single one of which you never lose sight: to do this you must first put it on the top of the pack, then take it in the right hand, all the others being in the left; and with the left thumb slip five or six cards over the reserved one; and over these five or six more, and so on, until all the pack is in the right hand. Thus the reserved card will always be found at the bottom; and if you now take the pack in the left hand, keeping only the top card in the right, you may pass all the cards

back into the right hand, slipping them alternately above and below the card which was at the top, until you come to the reserved card, which you may put above or below, as occasion may require.

The second false shuffle consists in taking with the right hand the upper half of the pack held in the left, to make it pass under the other half, moving the third finger skilfully in order to slip the cards in without altering their order.

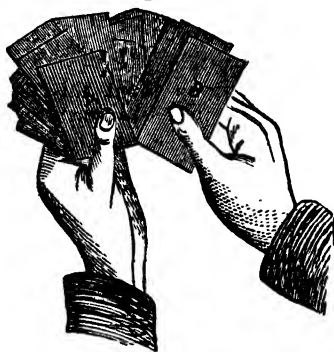


FIG. 16.

And remark first, that after having shifted the cards of one portion with the third finger, as we have first described, you must slip under the packet the card *B*, and two or three following below it, to appear to put some quite at the bottom, but then replace them under packet *A*; and 2ndly, that lot *A*, which was at first below, but is now at the top, must be taken lightly in the right hand, and quickly returned to its former place.

The third false shuffle consists in laying on the top of the pack the bottom card, and taking the cards, as represented in Fig. 8, in the right hand. You then allow five or six cards to fall on the table in the direction *A* (Fig. 16), and a few more on the right towards *B*. You now put on the card the first lot, then the others, employing alternately the right and the left hand, for the sake of rapidity. Thus the cards will appear to be mixed without having ever changed places.

The fourth false shuffle consists in keeping the bottom card always a little before or, better, a little behind all the rest of the cards; put it a little beyond the rest before, right over your forefinger, or else, which is best, a little behind the rest, so that the little finger of the left hand may slip up, and meet with it at the first shuffle. as thick as you can, and at last throw upon the table the bottom card, with as many more as you would preserve for any purpose, a little before or a little behind the rest; and be sure to let your forefinger (if the pack be laid before), or your little finger (if the pack be laid behind), always creep up to meet with the bottom card, and when you feel it, you may there hold it till you have shuffled over again, which being done, the card which was first at the bottom will come there again: then you may shuffle them before their faces, and yet leave your noted card at the bottom. You must try to be very perfect in this method of shuffling, and having once attained it, you may do almost what you please; for, whatever pack you make, though it is ten, or twelve, or twenty cards, you may still keep it next the bottom, and yet shuffle them often to please the curious.



### To Exchange a Card.

To do this, hold the card between the first and middle fingers of the right hand, and the rest of the pack in the

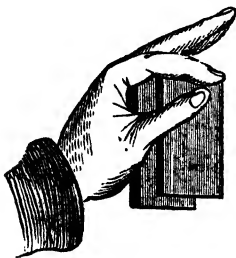


FIG. 17.

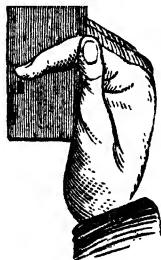


FIG. 18.

left hand, between thumb and forefinger. The upper card, which you wish to substitute for it, should be slipped a little forwards, towards the right hand.

*In this position the middle, third, and little fingers of the left hand are perfectly free, and it is with them you must take the card which is in the right hand, when for a single instant it approaches the left, to take the upper card which is to be substituted.*

Immediately after this exchange the hands and cards are as in Figs. 19 and 20; but the forefinger of the left



FIG. 19.

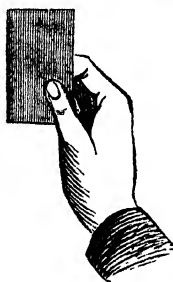


FIG. 20.

hand, which separates from the other cards the one just placed in the pack, should be withdrawn, that the cards may be in the position seen in Fig. 6.



### To Slip the Card.

To slip the card you must—

1st. Hold the pack in the right hand, and show the

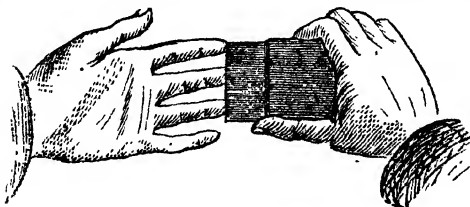


FIG. 21.

company the bottom card, which we will suppose to be the ace of diamonds.

2nd. Turn the pack upside down, to pretend to the audience that you take this ace with a finger of the left hand.

3rd. Take, instead of that ace, the card immediately following it, by managing to slip the ace of spades behind, with the third and little fingers of the right hand, which you have moistened an instant before on your lips.

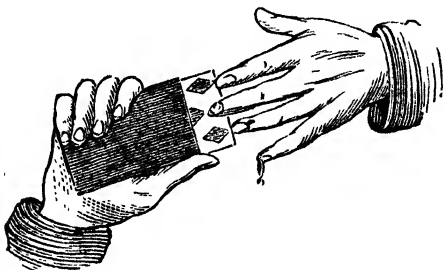


FIG. 22.

Observe in Fig. 22 the cards and hands in the position in which the spectator would see them, if he chanced to stoop and look under during the performance.

*Observe:* the finger of the left hand with which you draw out the second card, instead of the one at the very bottom, ought to be also moistened. (In your own rooms, a sponge in a saucer of water is useful for keeping the fingers damp.)



### To Put Away a Card.

To put away one card or several, you must—

1st. Hold in the left hand the cards which are to



FIG. 23.

disappear, placed diagonally on the others, and a little forward, towards the right hand.

2nd. Take these cards with the right hand, holding them rather tightly between the thumb and little finger.

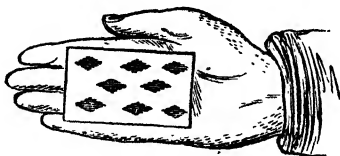


FIG. 24.

3rd. Rest the right hand carelessly against the edge of the table, to conceal the deception.

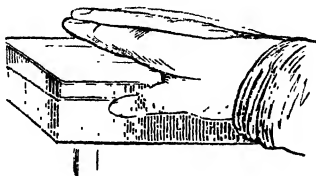


FIG. 25.

### To Place a Card.

You may place a card in two ways, namely, first, upon the other cards held in the left hand, at the

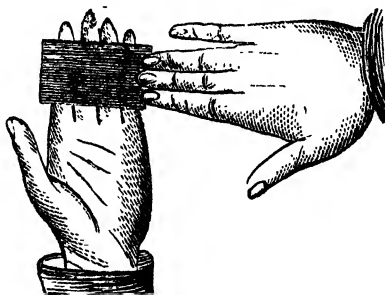


FIG. 26.

moment when you request one of the spectators to place his hand on the pack.

*Observe*, that in this case, the moment you have placed the card, you draw back the right hand a little from the left, so that you almost touch the cards with the forefinger of the right hand, as if to indicate to the spectator the spot on which you wish him to place his hand. By this means he will be unconscious that the object of bringing the hands into proximity was to effect a slight change, and with the utmost simplicity puts his hand on the pack to guard against your doing the very thing which you have already accomplished.

The second manner of placing the cards is effected at the instant when you take the pack from the table.

In this case you must not raise the pack by closing the hand in the ordinary manner, but make them slip towards you with some rapidity; otherwise the spectator would perceive that you held some in your hand.

You should content yourself with a moderate degree of rapidity, just sufficient to conceal your manœuvre,

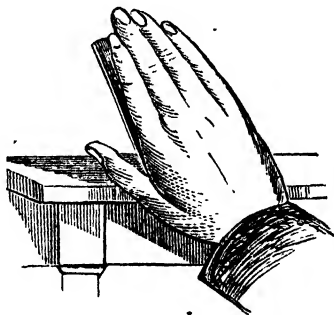


FIG. 27.

lest any extraordinary haste should lead to suspicion on the part of the audience. *Make haste slowly.*



### How to Force a Card.

By forcing a card, you make a person unsuspectingly take the one you intend, as follows:—

First find out privately which the card is you want



2nd. Take these cards with the right hand, holding them rather tightly between the thumb and little finger.

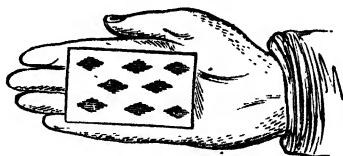


FIG. 24.

3rd. Rest the right hand carelessly against the edge of the table, to conceal the deception.

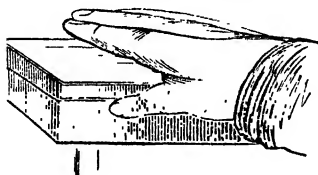


FIG. 25.



### To Place a Card.

You may place a card in two ways, namely, first, upon the other cards held in the left hand, at the

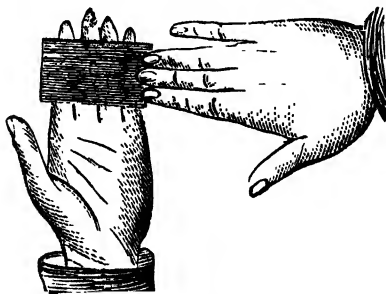


FIG. 26.

moment when you request one of the spectators to place his hand on the pack.

*Observe*, that in this case, the moment you have placed the card, you draw back the right hand a little from the left, so that you almost touch the cards with the forefinger of the right hand, as if to indicate to the spectator the spot on which you wish him to place his hand. By this means he will be unconscious that the object of bringing the hands into proximity was to effect a slight change, and with the utmost simplicity puts his hand on the pack to guard against your doing the very thing which you have already accomplished.

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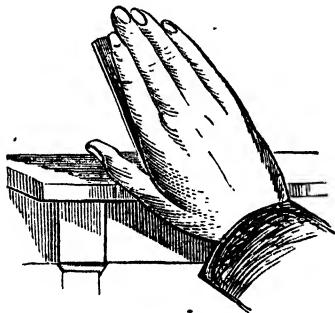


FIG. 27.

lest any extraordinary haste should lead to suspicion on the part of the audience. *Make haste slowly.*



### How to Force a Card.

By forcing a card, you make a person unsuspectingly take the one you intend, as follows:—

First find out privately which the card is you want

to force, while you are playing with the cards; then place it carelessly in the pack, still keeping your eye, or the little finger of the hand in which you hold the pack, upon it. Let some one choose a card; fan them out quickly from left to right, moving them about with the thumb more or less rapidly, so as to bewilder the party in making his choice. Directly you see him about to take a card, spread them till you come to the one you wish him to take; let its corner be put forward beyond the other cards just at the moment his fingers reach the pack. Any one unacquainted with the secret will take the card you really put in his hand, thinking he is making the choice himself. Having thus "forced" your card, he may shuffle it himself in the pack as much as he pleases; for let him do what he will, you will always be able to tell him what the card was. You do not actually push the card into the person's hand, but (which amounts to the same thing) your movement of the cards prevents him picking out any other.

Upon this trick many of the principal conjuring feats depend.

Should you meet one in company who knows this trick, you must have recourse to the following variation:

We will suppose that the card to be forced is the king of spades, but that the person you present the pack to will not take it, but persists in taking one near the top or bottom; let him do so, still keeping your finger against the king of spades. As soon as he has drawn the card he wishes, and while he is looking at it, slip the left forefinger between the spade king and the card immediately under it, pressing the cards tightly together in front, in order to conceal the finger. Ask him to return the card to any part of the pack he pleases, at the same time opening the pack at the place where your finger is, taking care to withdraw your finger immediately, lest it should be seen, when the card will be placed under the king of spades. You then shuffle the cards slightly. Too much shuffling might separate the two companion cards.

Ask the drawer whether he thinks his card is now in the pack. You say that you doubt it, and throw the top card off the pack on the table, face uppermost, and

so on, until you have gone through the pack. Ask if he has seen his card. You can now either tell him the name of it, or finish the feat in any other way you may think proper, as, by your watching for the king of spades, his card will be the one which follows it next.



### The Long Card.

The *Long Card* is a card, either a trifle longer or wider than the other cards, not perceptible to the spectator, but easily distinguished by the performer at a touch.

### *To Tell Beforehand a Card not then Chosen.*

For this you must, 1st, get a peep at the bottom card of the pack, and then shuffle, so that the company may think no card can be seen, and carry out carefully the first false shuffles. 2nd. Finish the shuffle so that the card remains at the bottom. 3rd. Go to one of the spectators and ask him in a whisper to please remember the card you show him. 4th. Make the pass, to bring into the middle of the pack the card which you showed him. 5th. After the pass, hold the two packets of cards in the position seen in Fig. 7, crossing each other slanting. 6th. Keep your *eye* and fingers on the card you have shifted from the bottom to the middle, and adroitly slip one card over the other, inviting any of the spectators to take one. 7th. Force the card on him. 8th. Let it be replaced in the pack by a spectator; and while he is trying to place it so that you will not be able to find it, prove that his precaution is useless by making the person to whom you had whispered name it.

*Observe*, that you must force the card naturally and easily; and to do this, select some one who appears to be a novice in such matters. This trick, when well performed, produces a marvellous effect. The difficulty of forcing a card ought not to deter a beginner, for two reasons—1st, because he will succeed in it with but very little practice; and 2ndly, because, should the spectator not take the card you desire, you may finish

the trick in a still more striking and extraordinary manner, as will be seen in the next article.



When a Card has been Drawn at Hap-hazard, and Mixed in with the Others by one of the Spectators, to make it Appear on the Top or in the Middle of the Pack, at Pleasure..

When the spectator, accidentally or annoyingly, evades taking the card offered him, the above trick need not appear to fail, if you take heed not to give the company notice of what you w're about to do. (In compliance with the first general rule, you should never be hasty in forewarning the audience of the trick you are about to play, in case any one should either be acquainted with it or puzzle it out, and take measures to prevent its success. This is why, in the foregoing trick, instead of telling the whole audience the card that will be chosen, you whisper it in the ear of one person only. You should even take the precaution not to tell the person that such or such a card is about to be chosen, but merely request him *not to forget* such a card; you are thus able to wait until the card is actually selected before you name it out loud.) When, then, a different card to the one you have mentioned in a whisper to one person, happens to be selected by another, you beg the latter to put it in the middle of the pack; that is to say, on the top of that half which you hold in the left hand, and you cover it with those in the right. At this moment you make the pass, to bring this card to the top of the pack; then employ the first false shuffle, and finish by letting it be at the bottom. Make the pass to get the under packet in the right hand and the upper one in the left (Fig. 8). Beg the spectator to see if the card he chose be on the packet in the left hand, requesting him to reply "yes" or "no," without naming the card; and while he is looking, take a rapid glance yourself at the bottom card in the right hand. As soon as by this means you have ascertained what card was selected, you put the two packets together, and request some one among the audience to shuffle them well. Take the cards again and lay them out, examining each, under a

pretence of ascertaining whether the chosen card is still there. When you have thus found the chosen card, manage to slip it under the pack, which you turn to shuffle the cards again. Finish by leaving it at the top; and while preparing to make the pass, address the company thus: "Ladies and gentlemen, not only do I know, without having seen it, the card which was drawn, but, also, I knew beforehand that it would be either at the very top or in the middle of the pack; and to prove that it is so, I have just placed it in that one of the two positions which you will now select." Should they name *the top*, it will at once be found there, of course, and you will request some one to look there for it; but should they desire to find it in the middle, you must make the pass, in order to slip the upper half into the left hand, keeping the lower in the right; and as at this instant you hold the right above the left, a little from it (Fig. 8), it seems to the audience that you have merely divided the cards, in order to take the chosen one from the centre of the pack.

*Observe*, that to render this trick very impressive, you will try to make the audience believe that it requires greater mental powers than manual dexterity. For this purpose, address the company thus: "I have just proved to you, ladies and gentlemen, that I am acquainted even with your thoughts; but if this evidence of my powers does not satisfy you, I will give you another still more remarkable." Then, supposing the first trick has not succeeded, return to it; but if it has, do the following.

*Second Observation.*—It is sometimes easier to have a forced card drawn after the second trick we have just described than after the first, because the spectator, seeing that you have guessed a card which was not forced, and which was chosen perfectly freely, persuades himself, at the moment, that you would guess with equal correctness any other card; whence he concludes it would be useless to be at all fastidious in his choice.

**Card Drawn by Chance, after the Pack has been Divided into Four Parts: Discover the Selected One.**

As soon as a card is taken, 1st, hold one half the pack

in each hand, as in Fig. 8 ; 2nd, have the chosen card put on the top of the left-hand packet, and cover it with the right-hand one ; 3rd, make the pass imperceptibly, so that the company may think the card is still in the middle of the pack, although actually at the top ; 4th, employ for a moment the false shuffle No. 1, finish by leaving the card on the top of the pack and concealing it (Figs. 24 and 25) ; 5th, give the cards to be shuffled by one of the company, who will think he has the whole pack, and will suppose that he is mingling with the others the card chosen ; 6th, divide the pack at the edge of the table into four parts ; 7th, make them equal, taking a few from the larger packets and putting them on those that may not have so many cards (use your left hand for this purpose, the right one not being at liberty), and when told on which portion to find the chosen card, take it up with your right hand, slipping the card on it as in Fig. 27. When the packet is in your hands, before showing the card, you may inquire whether they would like to find it at the top or middle ; to carry out which desire you will, if necessary, employ the pass as in the preceding trick.

*First Observation.*—In completing this trick it would be stupid to turn the card yourself, and ask the person who drew it if that was his, for it would be difficult, under such circumstances, to make the audience believe that he has not forgotten which card he drew, or else that he replies in the affirmative merely from politeness, that the trick may not be a failure. It is better then to wait until the card is named before you show it ; and even then, to make the thing perfect, manage to have it turned by some one else, to do away with all idea of trickery by confederates among the company.

*Second Observation.*—When, in doing this trick, you carelessly rest your right hand on your knee, or against the edge of the table, to hide the card you have removed, and you ask some one in which packet he desires to find the chosen card, one inconvenience may occur ; the person you address may know the trick, and try to make it obvious to the company by saying, “ I wish to find the chosen card in your hand.” This reply is embarrassing, and at first sight threatens to prove that

you are *no conjuror*; but you may get yourself out of the dilemma in the following manner:—Avoid gratifying the malice of the speaker by showing the company that there is a card in your hand, and that he guessed it; but return the removed card to any one of the portions, while in the act of lifting it from the table, make the four into one, and say, "Very well, I am sure now that the chosen card *is* in my hand, as you desired!" By this means, it is true, you will not achieve a brilliant finale to the trick, but the spectators will remain ignorant of what it was desired they should know, and the biter will be bitten. You may add, immediately afterwards, dividing the pack into several parts, and again concealing the same card, "If any other person will mention on what portion he would desire to find the chosen card, I will take care that his wishes are complied with." Some other person will then certainly select a portion, and the trick will terminate just as it would have done had no one sought to put you out.

**To Foresee a Person's Thoughts; shown by putting into the Pack a Card, chosen beforehand at hazard, in the Place and at the Number that one of the Company may desire a Moment afterwards.**

The card having been chosen, put into the pack, passed to the top, and put away, as in the preceding trick, you will—

- 1st. Have the pack shuffled by some one present.
- 2nd. Have the pack just shuffled put on the table near you, and in taking it up with the right hand, lay on it the concealed card.
- 3rd. Shuffle the cards yourself, so that the card chosen may be the third from the top.
- 4th. Make the pass by the fifth means (Fig. 9), so that the faces of the lower portion are upwards, after the pass; the chosen card will then be the third *from the bottom*.
- 5th. Hold the cards on the tips of the fingers of the left hand, so that in closing the hand their position may be reversed, and that when it is again opened, they



may be found as in Fig. 30. (They will not *appear* to have been reversed, since in both positions the back only of the cards is seen.)

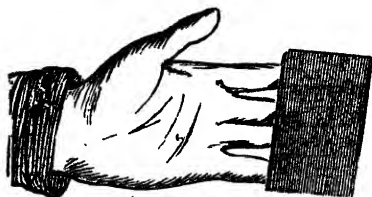


FIG. 29.

6th. Ask some one present where, between the third and tenth from the top, he desires the card to be found.

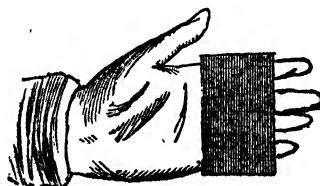


FIG. 30.

7th. If you are requested to find it the third, it is sufficient to have closed and opened the left hand, as we have just explained, since the card which *was* the third from the bottom, will be found the third from the top.

But if it be desired to be the fourth, you must, before closing and opening the left hand, take a card from the top of the pack, place it on the table, and then say, shutting the hand, "Now, one being gone, your card is the third," and if after opening your hand you take away two others, the company will think you have taken three from the same place, instead of having removed one from one part and two from another. By this means the chosen card, which is *always* the third, will, in case of need, appear to be the fourth. You perceive that to make the chosen card the sixth or tenth from

the top, you must, before closing the hand, remove three or seven, according to the case. The cards removed *before* closing the hand, with the two afterwards taken away, always form the requisite number before the chosen card, to let it be found in the desired position.

To have a Card Drawn, shuffle it with the others, and after having shown that it is neither at the Top nor the Bottom, make it remain alone in the Left Hand, all the others being dashed down on the Table or Floor by a Right-hand Blow

Force a card, and have it shuffled immediately into the pack, which will not prevent you from finding it, since you know it. If any other card be drawn, you must have it placed in the middle, and conceal it after making the pass as before described, previous to giving the pack to be shuffled. In either case you will yourself place it on the pack again, unperceived; then make it pass to the bottom, employing the first of the four false shuffles, to convince the company that you do not know where it is. After that you will make the pass, and hold your little finger between the two packets; then show that the chosen card is not at the top. Show also

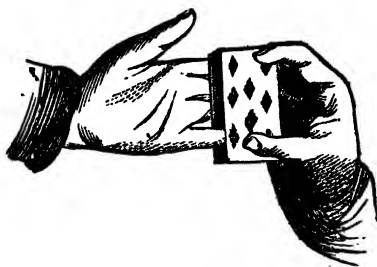


FIG. 31.

that it is not at the bottom, holding the cards as in Fig. 31. You must hold the cards in this manner with both hands, because, of course, the left hand little finger

is still separating the two packets, so that you will be quite prepared to make the pass, when you have once more reversed the cards, and are holding them as in Fig. 5. Make the pass to shift to the bottom the chosen card, which ought still to be found in the middle, under the top portion. After the pass, hold the pack tightly in the left hand, and strike it with the right. The blow will knock down all the cards except

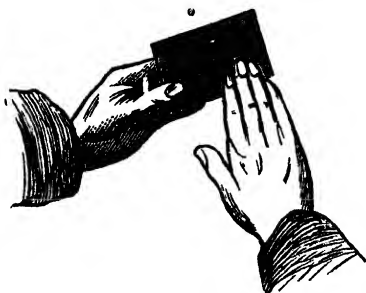


FIG. 32.

the bottom one, the selected card, which will be supposed to have been in the middle.

*Observation.*—To insure the success of this experiment, you must hold the cards very tightly in the left hand, having moistened the three chief fingers, and stretching them out so that they sustain the last card. The end of the middle finger ought, indeed, to come quite to the edge of the bottom card.

**To make the Four Aces appear in the Middle of the Pack, although they have been separately put in different Places.**

1st. Put the four aces in somebody's hands, and then take two from him, putting them plainly, in the sight of the audience, at the top and bottom of the pack.

2nd. Take the pack in your left hand, putting the little finger between the two halves, to prepare for making the pass.

3rd. Turn up the top card to show that it is an ace, and put it back leisurely in its place, to prove there is "no deception."

4th. Show that the bottom one also is an ace; but take care to leave the little finger still in the same place, as in Fig. 31.

5th. Close your left hand, so that the hands and cards may be in the position chosen in Fig. 5.

6th. Beg the person holding the other two aces to put them in the middle of the pack; but while pretending merely to divide the pack in the centre, that the two aces may be put between them, make the pass so that the two hands go into the position in Fig. 8. Thus the two aces, which before the pass were at the top and bottom, will be in the middle of the pack, and the person who puts in the other two, thinking they are as far as possible from those first added to the pack, is actually placing them all together.

*Observation 1st.*—When the two last aces have been put on the top of the left-hand packet, you must put the little finger between it and the cards in the right hand, which are now put on it, because if one of the spectators, knowing or suspecting the trick, should inform the others that the four aces are already together, you may prove the contrary (in the estimation of the majority), by making the pass once more, and so showing them at the top and bottom. (In this case there will really be three at the top, but you will show only one.) \* After this you repeat the pass, to get them all together in the middle as before.

*Observation 2nd.*—This trick not consisting in guessing the cards, like many others described, you cannot boast of performing it by any extraordinary quickness of mind. The bystanders hence being persuaded that it consists in manual dexterity, you must take advantage of this impression to attribute it to a piece of skill, all the more marvellous from its being perfectly impossible. You may say, "Ladies and gentlemen, you see clearly that the four aces are separated from each other; imagine, if you can, the amount of dexterity required to make the two that are at the top and bottom join the two in the centre, and that instantaneously and with a

single hand." Then take the cards in the right hand, as in Fig. 33, at the point A, and at the instant that you rapidly move the hand from the point A to the point B,

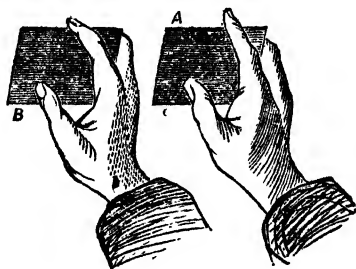


FIG. 33.

run the thumb along the corners of the cards to make them crack. The rapid movement of the hand and cracking of the cards deceives at once the eyes and ears of the company, and when, a moment after, you show them all four aces together, they think they know at what moment the trick was effected, which will not astonish them the less that, in the mode of performance which they fancy took place, the bringing them together was all but impossible.

### To Prove the Imprudence of Playing at Cribbage with Professional Gamblers.

When finishing the last trick, you will hold the cards face uppermost, and turn them over very gently, that no trick may be suspected, until you come to the four fives; but as soon as you have found them, slip them on to the top of the pack, and removing them instantly, as before described (Figs. 24 and 25), give the remainder of the pack to be shuffled, without intimating that you have concealed them.

2nd. The pack having been shuffled, cut, and placed on the edge of the table, put on it, while taking them up, the four concealed fives, and make the pass to get

them into the middle, where you will be careful to keep your little finger. (See Fig. 4.)

3rd. Propose a game at cribbage with some one. In dealing, give yourself a five, by slipping one out to meet your right hand, in four times the turn comes to you. You have but to say in taking up your hand, "*It is no use, gentlemen, your shuffling the cards when playing with me, I always hold the choice cards of every colour,*" and show your hand.

4th. If any one remarks that your adversary may have as good a game as you through his cards, you may reply you give this merely as an example, to show that you can deal yourself whatever cards you desire.

#### To Tell a Card Thought of.

- 1st. "Fan out" the cards in the right hand, as in Fig. 34, so that in showing them to the audience they appear

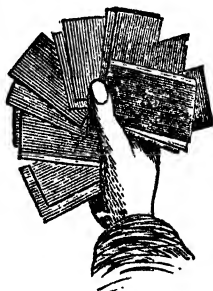


FIG. 34.

to them as in Fig. 35, that is to say, all the cards should be partly hidden by those on each side of it, except, in this case, the king of spades, which should be clearly seen in the upper part without any obstruction either from the fingers or from the other cards.

2nd. When you have thus spread them out, designedly in fact, but apparently by accident, show them to one spectator, begging him to think of one; and at the same moment, move the hand a little, letting it describe

a section of a circle, so that all the audience catch sight of the king of spades, without noticing that the other cards are all partially concealed.



FIG. 35.

3rd. Shuffle the cards either really or apparently, but without losing sight of the king of spades, which you lay on the table, face down.

4th. Tell the person who has thought of a card that the one in his mind is now on the table, and beg him to name it.

5th. Should he name the king of spades, turn it up and show it to the company, who will be amazed to find you have guessed the card thought of.

6th. Should he name another card (say the king of diamonds), tell him that his memory is at fault; that that was not the card he thought of first.

7th. While telling him (in various forms of expression, for the sake of gaining time) that he thought of another card, shuffle the cards rapidly, and apparently unconsciously, until you have found the card he has just named (the king of diamonds).

8th. Put it on the top of the pack, and (still appearing engrossed with other thoughts) go through the first false shuffle, to make believe that you have no particular card in view.

9th. Finish the shuffle by leaving the king of diamonds on the top of the pack.

10th. Take the pack in the left hand, and the king of

spades in the right (Figs. 17 and 18), and say, while playing out the card (that is, exchanging the king of diamonds for the king of spades), "What must I do, gentlemen, that my trick should not be a failure? What card should I have in my right hand?" They will not fail to call out, "The king of diamonds," when you will instantly turn it over.

*Observe*, that this trick, when well executed, always has the same effect, whether the spectator thought of the king of spades, or, from a desire to complicate matters, chooses another card.

*Observe also*, that you may make him think of a forced card, without employing the stratagem we have described in the first part of this action. To do this, you must pass several cards under the eyes of the person selected, turning them over so rapidly that he sees the colour confusedly, without being able to distinguish their number or value; for this purpose, take the pack in your left hand, and pass the upper cards into your right, displaying the figure side to the audience, and consequently only seeing the backs yourself. Do it so that each one is instantly covered by the next, until you come to the tenth (supposing that you desire to force the tenth), that you know it beforehand, and have secretly slipped it into its present position. This card ought to be a bright-looking and remarkable one, such as the king of hearts, or queen of clubs. Manage to leave it a little longer before the audience, describing a semicircle naturally and without effort; and during the interval keep your eyes on your adversary's, to see if he remarks it. When the spectator looks in that way at every card to the end, you may be sure, both that it is the last one he has fixed on, and that he does not suspect you of knowing it, because while exhibiting the cards to him you only see the backs yourself, and he does not think of your having counted them. I say he does not think of it, because I do not suppose that you have selected for the purpose a man who is himself likely to be expert at sleight-of-hand; and you may assure yourself of this by the degree of admiration which he has bestowed on your previous tricks. And besides, if you cannot succeed by either means in making him think of a



certain card, because he has already thought of one that he has not been shown, you can always have recourse to the exchanged card, which will produce nearly the same effect.

### To Shift the Card.

Put at the top of your pack any card you please—say the queen of clubs. Make the pass, by which you put it in the middle of the pack, and make some one draw it; cut again, and get the same card into the middle; make the pass again, to get it to the top of the pack, and then present it and get it drawn by a second person, who ought not to be so near the first as to be able to perceive that he has drawn the same. Repeat this process until you have made five people draw the same card. Shuffle, without losing sight of the queen of clubs, and spreading on the table any four cards whatever with this queen, ask if every one sees his own card. They will reply in the affirmative, since each sees the queen of clubs. Turn over these cards, withdrawing the queen, and, approaching the first person, ask if that be his card, taking care while showing it to him that the others may not be able to see it. He will tell you it is. Blow on it, or strike it, and show it to a second person, and so on.



### To Find, in a Pack put into the Pocket, several Cards which have been freely Selected by the Audience.

Desire two persons each to draw a card, and then divide the pack into two parts. By dividing the pack, it is here meant to lift with the right hand a part of the pack held, keeping hands and fingers in the position necessary to make the pass. (*See Figs. 9 and 12.*) Have the two cards put back into it, remembering to whom the upper card of the two belongs. Make the pass from where you have placed them, in order, by this means, to bring them to the top of the pack. Shuffle them, without altering the position of these two cards, and tell some one to put them in his pocket. Propose then, to draw out whichever of the two cards is selected,

which you will do by taking the top one, or that next to it, according to circumstances. Then bring out that of the second person.

—□—

**Another Method to Name what Card a Person has  
Drawn from a Pack.**

Force a *long card*, of course known to you. Give the pack to be shuffled, after having allowed the selecting party to push the card into it; and propose to him either to name his card or to cut it. You will act according to his reply. You may also tell him he may put the cards in his pocket, and you will draw out the one chosen: which is easy enough to do, since you can distinguish it by the feel. Or you will find it with your hand in a narrow mouth jar.

*Note.*—Should the person draw another card, you will perform, instead, the following trick.

**To Find in the Pack, and through a Handkerchief,  
whatever Card a Person has Drawn.**

Give the pack for a card to be drawn from it; and dividing the pack in two, have the chosen card placed in the middle. Make the pass at this place, and the card will come to the top. Put it on the table, cover it with a rather thin handkerchief, and take the first card under it, pretending, however, to feel about for it. Turn over the handkerchief, and show that this card was the one drawn.

**To Guess the Spots on Cards at the Bottom of Three  
Lots made by the Drawer himself.**

Ask a person to choose three cards from a pack, made by discarding all cards from the six to two downwards inclusive, informing him that the ace counts for eleven, the picture cards for ten, and the others according to the number of spots. When he has chosen these three, tell him to put them on the table, and to place on each as many cards as spots are required to make fifteen.

That is to say, in the example, eight cards would have to be put on the seven of clubs, four cards on the ace, and five above the ten. Let him return you the rest

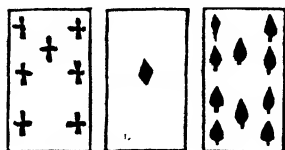


FIG. 36.

of the pack, and (while pretending to count something in them) count how many remain. Add sixteen to this number, and you will have the number of spots in the three bottom cards, as may be seen in this example where twelve cards remain, to which number add sixteen and the amount (twenty-eight) is the number on the three cards.



### To make a Person believe you can Distinguish the Cards by their Smell.

The pack, arranged in the above order, is presented to any one, that he may choose a card; open the pack at the place where it has been drawn out, and dextrously observe that which precedes it, by seeming to smell the place from which it was taken. It will then be very easy to name it, as it can be only that which follows in the order already indicated.

This trick will appear more surprising if performed thus:—Place three cards on the table, and then withdraw to a distance. After one of the cards has been touched, the company call you, and you come forward. An accomplice must inform you of the card in question by certain pre-arranged signs, such as—the thumb may denote the card lying at the right hand; the index finger that lying in the middle; the little finger the card at the left. Or, if he is smoking a cigar, by placing the cigar in the right or left corner or the middle of his mouth, he designates the touched card. After discovering, by a glance at your accomplice, which is the card just touched, you smell all the three cards, and appear

as if you were trying to discover the card by the sense of smell. If the company is made up of intimate friends, you may sniff playfully at the person who has touched the card, or others of the party, but in ordinary society this would be out of place. You then name the touched card. If no card has been touched, your accomplice omits the sign, by closing his fist, or taking the cigar from his mouth.



### **To make another Person Draw the Cards you call for.**

Shuffle the cards, and spread them out, face down, upon the table, without entirely separating them, having previously noted the bottom card.

Say to the spectator, "I will now ask you to give me certain cards, which I will name to you beforehand. The cards which I ask for, you must give me from these before us, the faces of which neither you nor I have seen, and yet in the end I shall have all the cards I direct you to give me."

The person will be very much astonished at this, and refuse to believe you, in spite of your confident air.

You then call for the card which you know is the undermost one, say the seven of hearts. Suppose, now, the person gives you the queen of spades, you boldly call out for your next card, "Queen of spades!" the other not knowing that you have it already in your hand. He gives you, perhaps, the king of hearts, and you at once ask for this as your next card. He now gives you the ace of clubs. In this way you can ask for any number of cards, but these are enough for explanation. Now you say, "The last card I want is the ace of clubs, but this I will find out for myself, by means of my very nice sense of smell."

Thereupon, with a grave face, you commence sniffing at the cards, until you reach the bottom one, which is the seven of hearts. This you take from the table, place it first in order among the cards in your hand, and you are now able to display all the cards that you have directed him to give you.

## TRICKS BY THE AID OF APPARATUS AND PREPARED CARDS.

### To Change the King of Hearts into an Ace of Clubs, and vice versa.

1st. Take two playing-cards with white backs, each a king of hearts, on the back of which you draw an ace of clubs in good black ink, so that they will, of course, appear as kings or aces, according to which side you may turn up.

2nd. Put these two cards into the pack, from which you take them as you require, as if they were ordinary cards. Begin the trick by holding them one in each hand, and showing only the king on the one and the ace on the other.

3rd. Stretch out your arms, and hold them very steadily at the two opposite ends of the table, to show that your hands cannot come into contact, then beg one of the audience to cover your hands, with the cards in them, with two hats.

4th. The moment they are covered turn the cards, so that the king shall become an ace, and *vice versa*. Leave them on the table, removing the hats yourself.

5th. Instantly afterwards take them up, apparently to shuffle them into the pack, but really to conceal them and put them into your pocket, leaving the pack carelessly on the table. Either the trick will be admired without any question rising about it, or it will be suspected you have performed it with prepared cards. Any one forming the latter suspicion, however, will be obliged to abandon it, when, on examining the pack, he finds but one king of hearts and one ace of clubs, made like the rest of the cards.

*Observe*, that this trick will aid in making the company think that the preceding tricks also were performed by changing cards, without bringing the hands together, and without exchanging a card.

### The Changing Card.

Have a long card, and get one of the company to draw it. When he has examined it, tell him to return it to the pack, which take again, and get a second person, at a distance from the former, to draw the same card. You may do the same with a third or fourth, if you please.

Then yourself draw from the pack as many cards as have been drawn by the spectators, taking care that among them is the long one chosen by them all. You then show those drawn by yourself, asking each separately if he sees his own card. They all reply in the affirmative. Then returning it to the pack, shuffle, cut at the long card, and showing it as what is now the bottom card, ask one of those who drew if that be his card. He replies *yes*. Strike it, and show it to some one else, who replies like the first, and so on with the others, who will think that your blows have the power of changing the card, rather than the fact that they have all drawn the same.

Should the first person not draw the long card, let all the others draw any they please, and cutting the pack yourself, put them all under the long card, pretending to give a blow each time. Then cut, or get some one else to cut, at the long card, and then return those chosen to the drawers, giving the top one to the last, and so on.



To make several Parties draw Cards and return them to the Pack, and to find them again.

You must have a pack of cards prepared like the pattern\* (Fig. 37), the end A B being a very little narrower than the opposite one C D as represented in the engraving. You will make one of the company draw a card from the pack, and will observe particularly whether he turns it in his hand. If he replaces it as he drew it, you will turn the pack, so that it may be in a contrary position to the others.

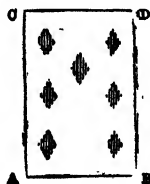


Fig. 37.

\* By screwing up the pack between boards in a vice, you can shave the edges all at once in this manner with ease and certainty.

If he turns it in his hand, it will save you the trouble. The card being replaced, you give the pack to some one to shuffle, and then have a second, or even a third drawn, observing the same precautions. After this, taking the pack by the widest end, in the left hand, you will draw successively with the right hand the cards that were chosen.

*Observation.*—This trick should not be performed before experts in sleight-of-hand; and should never be repeated to the same company, who may readily find out that the whole art consists in turning the pack.



**After Dividing a Pack into Three Parts, to Find a Card which has been Drawn in any Chosen One of the Three.**

You must have the long card drawn, and put back into the pack; making the pass, get it to the top, then make three packets, observing to put the one with the long card between the two others, because the middle packet is the one usually chosen; then ask in which the card is desired to be found, if the reply is, "In the centre one," you will show it immediately by reversing it; if, on the contrary, it is asked for from either of the other packets, take the pack in your hand, and put that portion in which it is desired to find it on the two others, keeping the little finger between it and the middle packet, on the top of which is the drawn card, in order to be able to *make the pass* at this place. You will now ask at which number the card is to be found, and if their reply is, "At the sixth," you count, and take away five cards from the top, and, making the pass, show the drawn card, which will appear to be the sixth.

**The Card Thought of, with its Number in the Pack.**

Put the long card the sixteenth from the top in a pack, as used at *piquet*, then spread out on the table ten or twelve cards from the top, and propose to a person to think of one, and to remember the order in which it is

found from the top card. Put back the cards on the pack, and make the pass at the sixteenth, which will thus be found at the bottom. Then ask the person who drew, at what number is the card he thought of. Count secretly from this number up to sixteen, while throwing the cards one after another on the table, and drawing them from the bottom, stop at this number, the seventeenth being the card thought of. Then ask the person if he has seen his card thrown out; he will reply, "No." You will ask him then at what number he desires to find it; and keeping back with the finger (*see* Figs. 21 and 22) the card thought of, you will withdraw those that follow until you come to the number asked for.



### The Card in a Ring.

Have a ring made with two settings, opposite to each other, A B, both having a square stone or crystal of the same size. Arrange one of them so that you can put beneath it a miniature card painted on paper; and let the ring be large enough to go easily on the third or fourth finger of the left hand.



FIG. 38.

Cause a forced card, similar to that concealed under the glass of the ring, to be drawn by one of the company, and tell him to burn it at a taper; while he is doing so, exhibit the ring on your finger, with the other setting displayed. Then, with the right hand, take a little of the ashes of the burnt card, and, under pretence of rubbing the stone with it, twist the ring round on your finger, and show it, observing that though the card has been burnt to ashes, you can make it reappear, by rubbing the setting with them.



### To Show Several Cards drawn from a Pack in a Telescope.

Have a spyglass of transparent ivory, turned of any shape you desire; only the place of the object-glass



should be covered, and that for the eye should not have a focus of more than two inches, in order that a miniature card, being placed on the inside of the large glass, which is blacked all round it, should appear of the ordinary size.

Have a pack in which the long card resembles that which is in the glass; having shuffled, force this card to be drawn. When the drawer has examined his card, give him the pack that he may replace it and shuffle it himself. Take back the pack, and make some one else apart from the former draw the same; tell him also to put back his card in the pack; then present the spyglass, and ask him if he sees his card in it. He will simply reply, "Yes." Show the other the same, and he also will reply in the affirmative.

Begin immediately another trick, to prevent these persons from naming their cards, and thus informing the audience that the cards drawn and seen by each were not different.



### To Discover, Blindfold, by a Sword's Point, a Selected Card.

You force a card, then, cutting the pack, you have it placed under the long card, and take care, in shuffling, to make it come to the top. Throw or lay the pack on the floor, and spread them out so that you may notice the spot where the drawn card lies; allow your eyes to be bandaged with a handkerchief, which will not prevent you from seeing the pack which is down on the ground, where your eyes can rest. Scatter the cards with the sword's point, without losing sight of the one chosen, which prick and take up finally, and show it. You may also allow two or three cards to be drawn, which you will manage to place under the long card, and then bring them to the top of the pack; when you will return to each the card selected by him, presenting it, in like manner, at the sword's point. All you have to do is to remember the order in which they were chosen. If an adept at making the pass, you do not need a long card.

**To Change a Card in a Person's Hand, while Recommending Him to Cover it Closely.**

Cut clean the three spots out of a three of spades; then place an ace of diamonds very neatly under the three of spades, observing that the ace is perfectly covered by the centre one of the three spades cut out. Run a stick of pomade lightly over the holes, and then let fall some powdered tar, which will at once stick to the parts greased by the pomade, on this card, and will thus form a three of spades on what was an ace of diamonds. You of course remove your *stencil* spade card.

Take in your hand an ace of diamonds, on the other side of which, back to back, you hold a three of spades.

The person who holds the prepared three of spades in his hand will exhibit it to every one, while you, also, will show the ace of diamonds in yours; and you will desire this person to place his card face downwards on the tablecloth; make him put his hand over it, and ask him if he is quite certain that he has a three of spades. On his assuring you that it is so, tell him he is mistaken, jest with him, and say that it is your ace which he now holds, pushing the hand under which he holds the card. This movement will make the powder which formed the three of spades fall on to the table. He will be astounded at finding his card to be really an ace of diamonds, while you will perfect the deception by showing in your hand the three of spades, and making him believe that you have changed the card, even when in his hand, without his perceiving it.

This trick should be performed swiftly, that no one may discover the means of deception by which it is accomplished.

**To Prepare Powdered Tar for the Foregoing Trick.**

Pound some cold tar in small lumps in a brazen mortar, till reduced to a very fine powder, strain it through a sieve, and then through muslin. Put this powder in a box, and when you want to use it, take a pinch either with your fingers or in a bit of paper; have

no fear of spreading it over the card, for it will only stick on those parts which have been greased, and will readily come off when the card is rubbed on the table-cover, by the movement of the hand holding it when you push it. It will not soil the card in any degree.

### To change a Card in Passing it from Hand to Hand.

Paint out one of the spots from the three of hearts, and keep this card in your pocket, placing it so that you can, when taking it up, present the unaltered end A. Take a pack of cards \*, at the bottom of which place the ace and three of hearts; make the pass to get them into the middle of the pack, and force them to be drawn by a lady and gentleman, to whom you will afterwards give the pack, that they may replace them, \* and shuffle them themselves.



FIG. 39.

While they are doing so, you will stealthily take your "doctored" card out of your pocket, conceal it in your hand, and taking the pack again, slip it on the top. Make the pass, and draw this card from the middle of the pack. Present it to the one who drew the three of hearts, concealing with your forefinger the place B where the heart is *not*, so that he may think it a three of hearts. Ask him, "Is this your card?" He will reply in the affirmative. Take it again with two fingers of the left hand, so as to conceal likewise the upper spot A; show it to the person who drew the ace of hearts, asking, "Is not that your card, madam?" To which she must answer, "Yes." You will say again, "It cannot be so," adding, as you show it to the first person, "This gentleman says it is his." He will reply, "It is not the same one." You will then show it as the three of hearts to the lady, saying, "I was sure it was your card, madam." She will certainly say, "That is not mine." You will affect to be indignant, saying, "You are trying certainly to deceive me, who can deceive every one!"

\* In this pack forty cards only are used, the eights, nines, and tens being discarded.

and striking the card with the finger, you will show them, one after the other, the two cards they drew, saying, "This is your card, madam, and this is yours, sir."

*Observe.*—Every time you wish to change the card, you should take it in the other hand.

### To Make a Burnt Card Appear in a Watch.

Have a card drawn by chance; ask for three watches from the company; have them wrapped up in paper by one of the audience, then placed on a table, and covered with a napkin. You burn the chosen card, and put the ashes in a box; soon afterwards you open the box, and the ashes have disappeared. The three watches are laid on a plate, and on one being selected by one of the spectators, he opens it, and finds first, under the glass, a morsel of the burnt card, and afterwards, in the inside, a card representing, in miniature, the one that was burnt.

First of all, you know beforehand, by arrangements of the packs already spoken of, what card will be selected.

You place the watches, well wrapped in paper, over the little trap of which mention is made hereafter in the description of the Magician's Table. When you have let your confederate know what card has been selected, he stretches out his arm, inside the table, to take one of the watches, and place what it is desired to find in it. The watches must be covered with a finger napkin, resting on bottles, or some such articles, that the hand of your confederate may be concealed, and the cloth itself not be observed to move.

You present to some one the three watches on a plate, putting that one nearest to him which contains the articles sought for, and of which your assistant has torn the covering a little, to inform you of his selection. If the person you apply to is cunning, and, for the sake of mischief, avoids taking the one you desire, merely ask him to alter their positions well, and pass on to some one else. This will appear to make the trick still more complicated.

As to making the ashes disappear from the box in which they are placed, you manage it by having a piece of card-board, or wood, exactly fitting the cover, so that on shaking the box, it drops down over the bottom. Being of the same colour as the interior of the box, it forms a double bottom, concealing the ashes from the eyes of the astonished audience, who are almost tempted to think that they have disappeared to combine into the form of the miniature card discovered in the watch.



### To Pass a Card from Hand to Hand.

To perform this trick a foreign made pack must be used, with the four aces alike so far that they have no distinguishing emblems but the mark of their suit.

Take the ace of spades and that of hearts, and fasten on the spade, a heart, and on the heart a spade, which can easily be done by cutting them out of other cards, very neatly and exactly.

Rub with a little soap, or very white pomade, the backs of the two spots you have cut out; then place them as directed, covering the real spots perfectly. All these preparations must be made before exhibition.

Separate the pack into two parts, putting one of these prepared aces at the bottom of each. Then take in the right hand the packet under which is the ace of hearts, and in the left hand, that with the spade.

Show the company that the ace of hearts is in the right hand, and the ace of spades in the left; when all the audience have noticed it, say, "Ladies and gentlemen, I shall now make these two aces change positions, although keeping my hands apart." You may even volunteer to have your arms tied on each side, so that they cannot communicate.

All the secret consists in stamping your foot, and making a movement, when giving your command, taking advantage of the noise to pass your little fingers across the spots, to remove the false ones adhering to them. You then show the company that the *left* hand now holds the ace of hearts, and that the ace of spades is in the right.

**To Make a Mouse, or any Similar Thing, come out of  
a Pack of Cards.**

Gum the edges of a pack together, and cut out the interior to make it a box. One perfect card must be gummed over those forming the box, and a few loose ones left on the top, which you will shuffle so as to make it appear that you have a complete pack in your hand. Another perfect card must be at the bottom, and this must be fastened at one side only, so that it will give way at the slightest pressure from within. It is, in fact, *a door* easily opening and shutting.

You open the door, and slip in a mouse, or anything else of its nature, and shut it immediately, keeping the pack in your hand sufficiently firm to secure the bottom card from being moved. You then tell some one to open both his hands, and put them close together; and having placed the pack on them, tell him you have the power of transforming a pack of cards into something very extraordinary. While chatting with him, to distract his attention, pretend to be seeking in your bag for some magic powder, and then instantly take up the card in the middle and throw it into your conjuror's pocket. As the bottom card gives way, from the mouse's weight, the latter will be left in the holder's hands.

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## PART III.

TRICKS OF CONJURING, LEGERDEMAIN,  
SLEIGHT - OF - HAND, &c., COMMONLY  
KNOWN AS "WHITE OR INNOCENT  
MAGIC."

### Elementary Observations.

**A** CONJUROR'S pocket is a bag or pouch, about a foot long, and ten inches deep, with several small pockets in the interior, in which you put those parts of the apparatus which it is desirable should be constantly at hand, and easily get-at-able. It is fastened in front of you by a waist-band.

It is not sufficient to possess skilful hands, light fingers, and the articles necessary for executing various tricks; besides all these, fluency of speech is required, because it is sometimes requisite to withdraw the too close attention of the spectators who are watching you, either in order to find you at a loss, or to discover the means which you employ. And as those who perform these tricks are not sorcerers, they must amuse the spectators by their conversation, in order to prevent them from perceiving the means they employ.

### Tricks with Cups, Balls, Boxes, Coin, Guns, Daggers.

The cup trick, as ancient as it is simple and ingenious, is alike one of the most amusing sleight-of-hand tricks, and of easy execution.



The bright tin cups, A, B, C (Fig. 40) are commonly used. They have the form of a cone, with the top cut off, and a double rim, D, at the bottom. The second rim should be an inch or so from the one at the edge of the cup.\*

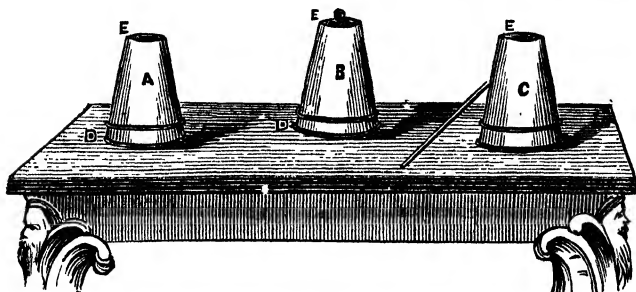


FIG. 40.

The top, E, should be somewhat sunken, so that a ball placed on it will not roll off. You will require also a small stick, the magician's wand, sometimes called *Jacob's Rod*; it is usually made of ebony, tipped with ivory at both ends. It is employed to strike the cups, and as it is frequently held in the hand in which the balls are concealed, it affords the advantage of keeping that hand closed, and of varying its position without any appearance of necessity to move it, whilst, without the assistance it affords, it would be often difficult and embarrassing to hide the balls.

Almost all the skill of this trick consists in artfully concealing a ball in the right hand, and making it appear and disappear in the fingers of the same hand.

Whenever you hide it in your fingers (which is called conjuring the ball), the spectators must suppose either that you have passed it into the other hand, or that you have slipped it under one of the cups; if, on the contrary, after having had it hidden in the hand, you make it appear between the fingers, they must be led to believe

\* This rim serves to raise the cup easily; it also enables you to hold it conveniently in the hand, while slipping the little ball of cork, called a juggler's ball. These balls of cork are blackened by burning the outside.

that it has come from some place which you have just touched with those fingers.



### To Conjure the Ball.

You take the ball, and, holding it in the right hand, (*see* Figs. 41 and 42), between the inside top of the thumb and the tip of the forefinger, B, you guide it with the thumb, making it roll over the fingers along the line from A to C, and separating a little the middle



FIG. 41.



FIG. 42.



FIG. 43.

and third fingers, D and E, you place it at the base of the two (*see* Fig. 43). Being so light, it will not fall, however slight the pressure of the finger joints on it.

To make the ball appear, you guide it in the same way, with the thumb, along the line from C to D. Every time that you either conjure it, or cause it to appear, the palm of the hand ought to be turned from the side of the table at which you are exhibiting.

When you hide a ball in your hand, you make believe that you have passed it into a cup, or into the other hand. In the first instance you make a movement with your hand, as if you were throwing it into the cup, and at the same moment you conjure it; in the second, you conceal it, and then bring the two extended fingers of

the right hand to touch the left, which is held open; then make a little movement as if placing the ball in it, and instantly close the left hand.

When you pretend to put a ball under a cup, it is to be supposed by the spectators that it is then in the left hand. You raise the cup with the right hand, and, opening the left, instantly let it drop in the hollow of this hand, and let it glide along the fingers. (See Fig. 44.)

To put the ball secretly under the cup, you should be holding it between the fingers of the right hand; you raise the cup with the same hand, and, while replacing it on the table, let go the ball, which, according to its position, should be just at the edge of the cup when you take it in your hand, or a little beneath it. (See Fig. 44.)

To put a ball secretly between two cups, you must,

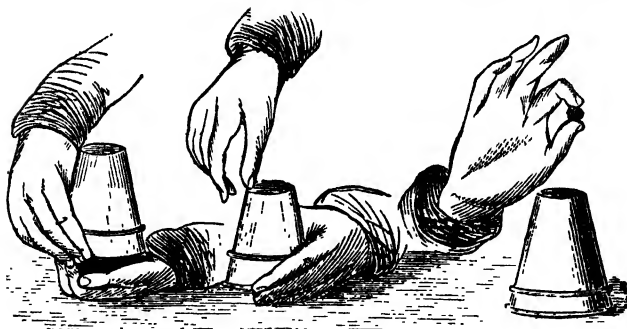


FIG. 44.

when leaving hold of it, cause it to spring to the bottom of the cup which you are holding, and then put that, as rapidly as possible, over the one on which you want it to be found.

When the ball is placed between two cups, and you desire to make it disappear, you must lift the two cups from the table with the right hand, and withdrawing rapidly with that hand the under one on which the ball was, you, at the same moment, with the left hand, lower the other cup, under which it is then to be found.

For the more easy understanding of the following tricks, we apprise the reader that we shall employ the following technical terms, to explain whether it be pretended or real, and that we shall adopt the numbers for the explanation of the various feats of legerdemain.

I. To place the ball under the cup is really to put it under that cup with two fingers of the right or left hand.

II. To put the ball under the cup, or into the hand, is conjuring, by pretending to shut it up in the left hand, which must afterwards be partially opened, to give an idea that the ball is being transferred to the cup, or elsewhere, by throwing it.

III. To make the ball pass under the cup, is to secretly introduce under it the ball which has been concealed between the fingers.

IV. To make the ball pass between the cups, is the same thing, except that it is to be placed between two cups, on the hollow top, *E*, of the under one. (See Fig. 40.)

V. To make the ball which was between two cups disappear, is to withdraw, rapidly and adroitly, the one on which it is placed, and lower the upper one, setting it on the table. The ball will be concealed under it.

VI. To take the ball, is to take it between two fingers of the right hand, and show it to the company, before conjuring it.

VII. To take a ball from under a cup, is really to withdraw it with the fingers, in full view of the audience.

VIII. To withdraw the ball, is to pretend to draw it out from the end of the wand, from the cup, or any other place, while sliding into the fingers the one which is hidden in the hand.

IX. To throw the ball through the cup, is to conceal while pretending to throw it.

X. To raise the cups. This is done in three different ways. 1stly, With the right hand, when you want to insert a ball secretly while in the act of restoring the cup to its place. 2ndly, With the wand, with which you tilt them up, in order to display the balls which have been made to pass into them; or 3rdly, With two

fingers of the left hand, when you wish to show that there are no balls under them, or that there are some which have been conjured into them.

XI. To cover a cup, is to take in the right hand the one which you intend to put over it, at the same time introducing a ball between the two.

XII. To cover a cup over, is to take up, with the left hand, the cup you mean to place over the other, and put it on, without inserting anything between the two.



[Tricks with one Ball.]

### To Put a Ball under Each Cup, and Get them Back.

The three cups and the small wand being placed upon the table, as shown in Fig. 40, you will begin the entertainment by such humorous remarks as may occur to you; for instance, something like the following, on the origin of the cups and wand:—

There are many parties who profess to juggle with the cups, who know very little about it: not very wonderful, if we remember how much pretension there is in the world, and how often it passes current for real knowledge. Why, even I, who now venture to present myself before this enlightened audience, do not know much about my art. I have learnt a little of late, it is true, for I am almost ashamed to confess to you, that but a little while ago I attempted to perform some conjuring feats, before a large company, with glass goblets! You may suppose I did not obtain much applause! I never venture to try this method now, except in the presence of the blind! Neither do I use china cups, lest while pretending to break the handles, I should, by some awkwardness or accident, destroy the cups themselves. Here, then, are the cups I use. They are composed of a metal once attributed by alchemists to Jupiter and Mars; to descend from celestial to human beings, they are made of TIN! Look! examine them for yourselves (taking up the cups, showing them to the spectators, and replacing them). All my art, I boast of it, consists in so fascinating your eyes, and fixing your attention, that the balls shall pass to and

fro, into the cups, and out of them, without your being able to see them. In fact, I have engaged a special express train to convey them; and their excursions into the cups, and out of them into my hands, will be so rapid that lightning is not to be mentioned in comparison. No telling that the train has started until the passenger is at his journey's end! Hurrah for the traveller! Here he is! Look at him (showing the ball). He does not look as if there was much magic about him! Now for the Conjuror's Express. (Suddenly waves his hands.) Oh, no! it is not in my hands. There's no magic in them! In fact, I fear the only magic I possess is in my tongue; and, to let you into a secret, all this talk is meant, like a good deal of other talk in this bright world of ours, merely to deceive the listeners! Only I am candid enough to tell you my object, and it is not every one will be so honest. You see I am no conjuror!

Here is Jacob's little rod—no, not Jacob Little's rod! It is the storehouse whence I shall draw my conjuring balls\* (holds the wand in the left hand). I might draw from it something more like a p-rod-igy if it were the real Jacob's rod. Such as it is, however, there is not, perhaps, a more curious one in the four kingdoms, since the more I take from it the more remain. I withdraw† (VIII.) this ball (showing it, and placing it (I) on the table). You will observe that there is not a thing under these cups (shows the interior of the cups), and that I have not any ball in my hand (showing his hands); I take (VI.) this ball, I put it (II.) under this first cup, I draw (VIII.) a second ball from my little wand, and put it under this second cup (really put there). I may as well tell you that the greater part of the jugglers who exhibit only pretend to put the balls under; but as for me, I disdain such deception, and you may see that I really put them there. (Raise the cup B, and taking the ball put into it, show it to the company.) I put it back again (II.) under this cup; I draw out (VIII.) this third, and put it back (II.) in the same way under the last cup.

\* With the other hand you secretly take from your conjuring pocket a ball which you conceal in your fingers.

† These figures here refer to the technical terms.

Perhaps you will say that this is nothing very extraordinary, and that you are quite able to do as much? I allow it: but the difficulty consists in taking out these balls through the cups. (Strike the first cup with the wand.) I draw out (VIII.) this first ball (showing it). I put it (II.) into my hand, and I send it to *Tin-buctoo* (opening the left hand). I take out this one (VIII.) (touching the second cup with the wand). I put it (II.) into my hand, and I send it to the East *Tin-dies* (opening the left hand). I draw out (VIII.) the last, and I place it on the table. You can see that there is not a thing, now, under any one of the cups. (Overturn the cups with the wand), (X.).

—□—

[With a single Ball left on the Table.]

### To Pass a Ball into Each of the Cups, and Withdraw it Again.

I put back these cups into their places; I take (VI.) this ball and put it (II.) under this first cup; I take it out again (VIII.); now just satisfy yourselves that there is nothing there (raise (X.) the cup with the left hand). I put it (II.) under this other cup; I conjure it away again (VIII.) (raise (X.) the cup). I put it under (II.) this third cup, and withdraw it (VIII.) again (raise the cup with the left hand, and put the ball on the table).

—□—

[With the single Ball left on the Table.]

### To Conjure a Ball Through Two or Three Cups.

I never have a ball concealed in my hands, as is done by so many who pretend to be prestidigitateurs, no, not I (showing the empty hands). I take (VI.) this ball, and I put it (II.) under the cup B.\* I cover it over again (XII) with this one, c, and I withdraw the ball (VIII.) through the two cups. (Show it while placing it on the table; then return the cup c to its place, and raise (X.) the cup B, to show that there is nothing there.)

\* The cups will henceforth be distinguished as A, B, c, as is indicated in Fig. 40.

I put back (VI.) the same ball; I put it under (II.) the same cup, B, I cover it again (XII.) with the other two cups, C and A, and I conjure away the ball (VIII.) through all three cups. (Show the ball and place it on the table.)

[With the single Ball left on the Table.]

**To Pass the same Ball from Cup to Cup.\***

Now, I shall beg you to give particular attention to my performance, and you will distinctly see the ball pass from one cup to another. (Place the cups at a greater distance from each other.) I will take (VI.) this ball, and I will put it (II.) under this cup, C; there is nothing, you perceive, under this cup, B. (Raise it, slip in the ball, and take the wand in the other hand.) I command the ball that I have put under cup C, to pass under this one, B. You see it, do you not? (Guide the wand so that its tip passes from one cup to the other, as if it were following the movements of the ball.) Now, you will see that it has passed! (Raise the cup with the left hand, and taking the ball in the right, show it to the audience.) I put it back (II.) under the cup B: there is nothing under this one, A. (Raise this cup with the right hand, to show it empty, and while doing so, slip in the ball.) Now, I am going to make it pass under this last cup, A. Open your eyes; come nearer, if you like. (Again make the wand appear to follow the course which the ball is pursuing.) You say that you did not see it pass? Well, that is not very surprising, for I cannot say that I perceived it myself! Here it is, however, under the cup. (Raise cup A, and place the ball on the table.)



[With the same Ball.]

**The Cups being covered, to Pass the Ball from one to the other, without raising them.**

Was I not right when I told you that the most clear-

\* It is hardly needful to point out that these feats are those by which tricksters win at "thimblérig," the only difference being, that here cups and balls are employed, while there a pea and small cups are used.



sighted would not see *much*; but console yourselves! Here is a trick of which you will not be able to see anything at all. I take this ball, and I put it (II.) under this cup, B; I cover it (XI.) with these two other cups. (You take one in each hand, and secretly place the ball on the top of cup B) Now, pay attention; convince yourselves that there is no trick about it. You see that there is nothing in my hands (showing them). Now, I command the ball to rise, and place itself on the top of the first cup. (Lift the cups, and show that the ball is on the top of the lowest; then replace them.) I replace (II.) this ball under the same cup, B, and cover it in the same way. (In covering it, take a cup in each hand, and introduce the ball between the second and third cups.) I draw out\* the ball which is under these three cups; and throw it through the first one (pretending to throw). Now, observe that I have not concealed it; there is nothing in my hands (exhibiting them); it is gone, however! (Raise the first cup with the left hand, put the ball on the table, and the cups in their original position.)



[With the same Ball set on the Table.]

### To make a Ball Pass through the Table and Two Cups.

You are, doubtless, surprised, that having really only one ball, I should have been able, after having shown it to you, to make it pass through this cup without raising it. But you need not wonder much at that! I have far greater marvels in store for you. I can transport the steeple of a church from one spot to another. I could set St. James's Church in Kensington Gardens, without displacing a single stone, if it were worth my while to do so. I have a flying wagonette, in which I could transport myself to the Antipodes in twenty-four hours. Some of these days, when I have brought my machines to perfection—say some five or six centuries hence—I will exhibit to you the marvels of which they

\*The only ball with which you are conjuring being under the third cup, you cannot really show it; but you pretend to have taken it out, and put it in the fingers of the left hand, which you raise in the air, waving it backwards and forwards.

are capable. But while waiting for "the good time coming," when I may be able to show you such miracles. I will continue to do what is merely amusing you. I will place (II.) this ball under this cup, A; I take it away again (VIII.) (showing it, and pretending to put it into the fingers of the left hand). I cover (XI.) this cup with the two others, B and C (slip the ball between these two cups, using only the right hand, and pretending to hold it still in the left), and I make this same ball pass through the table, and the two cups. (Put the left hand under the table.) Here it is! (raising the upper cup).

—□—

[With the same Ball.]

To take a Ball from one Cup, and make it Pass between two others.

\* I take this ball, and I put it (II.) under this cup, A. Now, I beg you to observe, that there is nothing under the others (show them, and slip the ball under cup c,) nor yet in my hands. I take away the ball which is under this cup, A (pretending to withdraw one, and showing the bottom of the cup, in order that the attention of the spectators may be distracted from the fingers); I cover this cup, c, with the two others, A and B, and I throw it (IX.) through these two cups (raising them, and showing the ball).

—□—

[With the same Ball and a Shilling.]

I take this ball, and place it (II.) in this hand; and in the other I put this shilling. But in which hand do you think the ball is? and where can the shilling be gone? (Whatever reply the spectator may make, you will show that he is mistaken, for that the whole is in the right hand. This trick serves as a blind, to enable you to take another ball out of the pocket, when returning the coin to it.)\*

\* Or, without destroying the connection of these tricks, omit this one, and pretend to let the ball drop, so that when appearing to pick it up you may take another ball from the pocket.

[With the Ball which remains on the Table, and another, taken secretly from the Conjuror's Bag.]

**To Pass two Balls, placed under two Cups, into a third.**

Well! like all the rest of the world, you are, I suppose, easily dissatisfied. I must do better than well, surpass even myself, or I shall not please you! Be it so! But I shall need more implements, another ball at least! Where shall I find one? Have you one to lend me? Or you, or you? No! Well, I must see what my art will do. Suppose I take this ball, and cut it in two! (You take it in the left hand, and holding the wand in the right, pretend to cut it; replace the wand on the table, and instantly slip to the ends of the fingers the ball you have just taken from the conjuror's pocket.) Nothing is more convenient than the power of being thus able to multiply balls. When I want money, I shall cut balls into halves, quarters, eighths, and so on, until I shall *halve* two or three hundredweight. Then I shall sell them. That is what you may call "cut and come again" (place the two balls on the table). Now, observe that there is absolutely nothing under this cup, A; I put under it (II.) this first ball. Now see that there is nothing under the other cups (slip the other ball under cup B). I take this second ball, and put it (II.) under cup C; there is now a ball under each of these two cups, A and C. I take away (VIII.) the ball from under the cup C, and throw it (IX.) through the centre cup B. Observe that it has passed through (raise the cup B, and slip in the second ball). Now, then, I command the ball which is under cup A to pass to cup B. Ah! it has obeyed me! See! there they both are (raise the cup and show the two balls).

[With the two Balls on the Table.]

**Two Balls under one Cup, to Pass under the other Two.**

When I was at Rugby, the master always told me I ought to know two different ways of doing the same

exercise. I have first made these two balls pass into the centre cup; I am now about to make them pass out of it. The one trick is not more difficult than the other. I take these two balls you see, and place them under the cup B. (Really put only one ball under; the other you conceal, while pretending to place it with the one taken out of the left hand.) Now I beg you to observe that there is not anything under this cup, A, nor under this other one, C. (Slip into the latter the concealed ball.) Now I command one of the\* balls which are in the middle cup to pass under one or the other of those that flank it. Ah! there it is, gone already! (Raise the cup B, to show that there is only one ball, and taking, with the right hand, the one which is under it, exhibit, and replace it (II.) under the same cup, B.) Let us see into which cup it has gone! (Raise first the cup A, and slip into it the ball taken from cup B.) How now! it is not here! Has it dared to disobey me? No! Here it is, under cup C. (Raise this cup.) Now I command the other ball to pass under cup A. (Raise the cup, and show that it is beneath it.\*)

[With the Two Balls, a Third, which you show, and a Fourth hid in the Hand.]

### To make three Balls Pass under one Cup.

This is a mere trifle; I am going to show you something much more extraordinary with three balls. (Take a ball out of your conjuror's pocket, and place it on the table, while you keep another concealed in your hand.) Now make sure there is not a thing under any of these cups. (Raise them, and slip a ball under cup C.) I take this first ball, and throw it through cup C (IX.). You will see that it has passed into it. (Raise (X.) the cup with the right hand.) I take this second ball, and throw it (XI.) through the same cup. There! It has gone into it, you see. (Raise (X) the cup again.) I take the third, and make it pass in the

\* This trick is generally performed with three balls; but it is much more extraordinary with two.

same manner. (Raise the cup (X.) and show that they are all three in it.)

[With the Three Balls under the Cup and the concealed one.]

**To make Two Balls Pass from one Cup to another without touching either of them.**

Now here is another, which I have never been able to comprehend myself, and which is certainly bound to astonish you. (Raise the cup c, and take out of it the three balls; place one on the top of each cup, and raising cup c, slip under it the fourth ball, which has been concealed in the hand.) I take this ball (the one on cup B) and put it (II.) under the same cup. I take this one (from cup A) and I place it (I.) under the same cup. (Here you slip also the one which is concealed in the hand.) I take this last, and I throw it (IX.) through the cup c, and to show you that I do not deceive you, there it is! (Raise (X.) cup c, and slip into it the ball just concealed.) You will observe now that there is a ball under each cup. Now into which of these two cups, A or c, do you wish the ball under the middle cup to pass? (Lift the cup selected, which we will suppose to be c, and show that there are two under it.) I take these two balls and put them back under the cup c (you will only, in reality, replace one); now you will see that there is not any under cup B. (Slip into this one that which you have just abstracted from cup c, and show that you have not anything in your hand.) Now I will command one of those under cup c to go and keep company with the solitary individual under cup A; there! it has gone! (Lift the cup A, and place on it two balls; lift c, and show that there is only one under, which you will now place on it; and avoid touching B, under which a ball still remains.)

[With the three Balls on the Cups and the one concealed under one of them.]

**To make the Three Balls Pass under one Cup from underneath the two others.**

I take this ball (the one which is on cup c) and put

it (II.) under the same cup ; now I will command it to pass to the centre one ; there it is ! (In lifting cup B, slip into it the one you have just concealed ) I take this one (one of the two placed on cup A) and I put it (II.) under the same cup, c ; and command it to pass under cup B. There it is. (In raising the cup you slip in the third ball.) I take this third ball, I put it into cup c, and command it to pass under cup B. Ah ! it has passed ! (While lifting this cup you introduce into it a third ball ) I take this third ball, and place it (II.) under cup c, and order it to pass into cup B along the table, in the sight of the audience. (Take the wand in the left hand, to pretend to indicate the route it is to travel between the two cups.) You do not see it ? Here it is ! (You draw it from the end of the wand (VIII.), which appears to point it out.) Now, make haste ! (You throw (IX.) the ball through the cup B, and then show that all three are there, and that the other two cups are empty. Then place the three balls on the table, keeping the fourth concealed in the hand.)



[With the three Balls on the Table, and the one Hidden in the Hand.\*]

### Multiplication of Balls.

If there's any one among the party who believes in witchcraft, I very earnestly advise their retiring ; since I am about to perform much more surprising wonders than any you have yet seen.

I place (I.) these three balls under these three cups ; I take away (VII.) this first ball (the one which is under cup c), and I put it (II.) into this vase ; I take away (VII.) this third (the one under A), and put it into the same (every time you raise one of the cups to take out a ball, you slip into it the one which has been kept

\* To perform this trick, have a vase of tin, at the bottom of which is a false bottom, on hinges, A, which can fall at pleasure, when being turned over on the table, by means of a small trigger, placed at the lower part of one of the handles, B. You have previously put a dozen or so of balls between the false and the real bottom.

hidden in the right hand, so that after having pretended to throw the three balls into the vase, one will still be found under each cup ; after doing this with the third cup, you begin again with cup c, and continuing until you have pretended to take twelve out, and throw them



FIG. 45.



FIG. 46.

into the vase). Perhaps you think that I use the same balls over and over ; but to prove the contrary to you, I will show you the whole dozen (you turn over the vase, so as to throw out the balls concealed in it).

*Observation.*—If this vase is properly made and managed, you may hold it up to show the inside, and even turn it upside down before beginning the trick, to render it impossible for the audience to suspect that the balls are put in it beforehand.



[With the three Balls still under the Cups, and one hidden in the Hand.]

### To make a Ball Pass under each Cup.

I put all these balls into my pocket ; now I take (VI) this one (the one hidden in your hand), and I will make it pass across the table, under the first cup c (conceal it). I take another from my conjuror's bag (showing the same ball), and make it pass under this cup B (conceal it again). I take a third (showing again the same ball), and make it pass under this last cup A (concealing it). Now they have all passed (turn down the cups, and, in replacing B, slip under it the ball which has been in the hand, putting the other three each on one of the cups).

[With the three Balls on the Cups, and the one slipped under the middle Cup]

### To Draw Two Balls out through the same Cup.

*Introducing the next Trick.*

Now we will employ only two balls (take the one which is on cup c, and put it (II.) into your conjuror's bag; take in the fingers of the left hand the ball on cup B, show it, and at the same time cover cup B with cup c, slipping into it (IV.) the one you pretended to put into the bag; you take the ball on cup A with the right hand, and showing the two balls, one in each hand, say):—"Here you see two balls. I place them (II.) under this cup, A (put only under it that held in the left hand), I draw one of the two balls out of the same cup, A. (You show it, and put it on cup c. You lift up cup A, and take the ball from under it with the right hand, and say):—"That leaves only one (return the ball to under the cup, II.). I now take away the other little joker (VIII.), lifting up the cup to show that it is empty' Take one of the two balls, which seemed to have been left alone, and put it in your bag, saying):—"And I pocket this one.

This serves as a prelude or introductory flourish to the subsequent feat.



[With one Ball concealed under the centre Cup, another under the one covering it, a third concealed in the Hand, and the fourth upon the Table.]

### To make the same Ball Pass successively through the Three Cups.

I am now going to show you a very pretty trick with this single ball.\* I forgot to show it to you at the beginning of the performance.† I cover (XI) these cups (putting cup A on cup B and c). I take (VI.) this

\* The preceding trick should lead the spectators to imagine that one ball only is left, that on the table.

† When playing with one ball only.



ball, and I throw it (IX.) through this first cup. (Raising (X.) the cup A with the right hand, you show that it has passed between c and A; then returning it to its place on the table, you slip under it the one concealed in your hand.) I take (VI.) this same ball, and I throw it (IX.) through this other cup, c (raise (X.) the cup c, and show that it has passed under it; slip under it the one now in the hand, and put it in its place). I take this same ball once more (VI.) and throw it (IX.) through this last cup B. (Raise (X.) the cup B, take away the ball which was under it, with the left hand, and place it on the table. While replacing the cup with the right hand, slip under it the concealed ball.)



[With the three Balls under the Cups, the one on the Table, and two which are taken from the Conjurer's Pocket.]

**To Pass the Balls under Two Cups under the Third,  
without raising the former.**

*(Six Balls really used, but only three apparently employed.)*

Let us resume the series of tricks which I interrupted, and play, once more, with three balls. (Take two balls from your pocket, and place one on the top of each of two cups; the ball on the table is just on the third cup.) I take (VI.) this ball (the one which is on cup c). Now I throw it into (IX.) this same cup; there it is, under it! (Raise (X.) the cup, show it, and slip into it the one in the hand.) I take (VI.) this other (the one on cup B). I throw it (IX.) into this cup, B. (Raise this cup, show that it is inside, and cover it up again.) I take away (VIII.) this ball from this same cup, B, and I throw it through (IX.) this one, c; you will observe that it has reached its destination. (Raise (X.) the cup c, showing that there are two in it, and adroitly slip in the one in the hand.) I take (IV.) this ball (the one on cup A), and I throw it (IX.) into the same cup; there it is! (Raise the cup with the left hand, exhibit the ball, and cover it once again.) I take away (VIII.) this ball from this cup, A, and throw it into cup c. You

may convince yourselves that it is there. (Raise (X.) cup c, show the three balls, and slipping into it the one in the hand, put the three on the table.)

[With the three Balls under the Cups and the three on the Table.]

**To make the Three Balls Pass consecutively through each Cup.**

(Again take the three balls on the table, and put one on the top of each cup.) I take this one (the one on cup c), and throw it (IX.) into the same cup. There it is! (Raise the cup, take away (VIII.) the ball, while showing that it has gone into it, and slip in the one concealed in the hand; you put back the ball on the same cup. I take this one (the one on cup b) and I throw it (IX.) through the same cup (show that it has gone into it; take it away (VII.) and slip under the cup the ball in the hand; put this also on the cup b). I take this last (that on cup a), and throw it (IX.) through this third cup, a; there it is! (Raise the cup a, take up (VII.) and show the ball; and slip under the cup, while replacing it, the one in the hand, place the hidden ball on the cup, and there will now be none in the hands.) You may see clearly that I have only these three balls on the cups. (Show that the hands are quite empty.)



[With three Balls on the Cups and the three underneath them.]

**The Balls having been replaced in the Conjuror's Bag, to make them return under the Cups.**

I take these three balls, and put them back into my pocket. (Keeping one of the three in your hand.) I am afraid I have now exhausted all my power of amusing you. I used to know some very pretty tricks, but I fear I have forgotten them. What a misfortune is a bad memory! (Pretend to be considering.) Ah! now I do remember two or three very amusing ones. Come, you little fellows (to the balls), go back again under the cups! (Lift the cups, showing the balls beneath them.) See how alert and obedient they are! When I marry,

I hope my children will be as promptly obedient. They will be perfect models. (Cover each ball with its own cup.)

[With the three Balls under the Cups and the one in the Hand.]

### To make the Balls Pass through Two Cups.

I take away (VII.) this ball (the one under cup c). I cover it (with B, passing (III.) the other ball which is in the right hand between the two cups). I take (VI.) this ball (the one in the left hand), and throw it (IX.) between these two cups (B and c). There it is! (Raise the cup (X.), and while showing that it has passed between them, slip in the one in your hand.) I take this other ball (the one which was under cup B), and throw (IX.) it also through the two cups (B and c). There it is! (Lift the cup (IX.) again, showing that there are two balls, and slip in the third (III.). I take this last ball (the one under cup A). I cover again these two cups, B and c (with the left hand), and I throw (IX.) this third ball through these two cups. Here they are all three! (Raise the two upper cups, show the three balls on the top of cup c, and cover it over again with the others.)



[With the three Balls on the top of Cup c, and the one concealed in the Hand.]

### To draw out Three Balls through Two Cups.

I draw out (VIII.) the first ball, and put it (II.) into my pocket; I draw out (VIII.) the second in the same way, and put it (II.) also into my pocket; I draw out (VIII.) the third, and put it in my pocket. (Really put the one in your hand.) You will see now that they are no longer under the cups. (Lift cup A with the left hand, and put it into its place on the table; lift with the right hand cup c, keeping it over cup B, held in the left hand. Put down B quickly, holding it a little on one side, and at the same time place on the table c, under which the balls still are, not having had time to roll away.)

[With the three Balls left under the centre Cup, and three more taken from the Conjuror's Pocket.] .

**To Pass Three Balls, at one Stroke, through a Cup.**

I take these three balls again (you take them from your pocket, put them on the top of cup B, and cover it with cup A); I order them to disappear, and to pass under this other cup, C (hastily withdraw cup B with the left hand, as in the preceding trick, leaving in the centre of the table cup C, under which three balls will be found); here they are already, under this cup (C, which is between the other two. Take them away; and putting them back on the same cup, let them be again found, in the same way, under cup C; at last take the three balls, and, putting them back in the pocket, pretend to make them pass through the table under the cup where the other three really still are; put back two of these three into your conjuring bag, out of which take two white balls, which you put on the table).

[With the black Ball on the Table, two white Balls (they are chalked), and a black one, hidden in the Hand.]

**To Pass Three Balls from one Cup to another.**

I will now exhibit a feat to prove that I do not conceal or conjure away the balls. You see that there is nothing under this cup, C. (Slip into it the black ball concealed in your hand.) There is nothing very remarkable, I think, under this one, B; so I will place under it these three balls. (Conceal one white one.) Well, there is not anything under this cup, A, either (slipping in the white ball). I command one of these two white balls, which are under cup B, to pass under this one, A. (Lift cup B, and take the white ball in the fingers of the left hand, and the black in those of the right; show them, saying) You will observe that there is now only one white ball; I will put back these two balls under cup B (put back only the white, concealing the black one, while pretending to put it with the other, in the left hand), and there it is, passed under cup A. (Raise cup A, and slip under it the black ball) Now

I will command the black ball to pass under this cup, A. (Lift cup B, and take up the ball in it, with the fingers of the right hand, and show it.) I put it back (II.) under this cup (concealing it), and I show you that it has passed under this one, A (slipping in the white ball); I now order the white ball, which is under cup B, to pass under this one, A; there! it has flown in just in the same manner. (Lift cup A, and show the three balls: replace them, one on each cup, with the black ball in the centre.)



[With the three Balls placed on the Cups, and the one which was slipped under one of them, in the preceding Trick.]

### To make the Balls Change Colour.

If there be any one of the audience who understands conjuring with cups, he ought to know that it is not possible to perform this trick by the ordinary method, and with only three balls. However (showing your hands), you may convince yourselves that I have not any more. I take this white ball (the one on cup c), and I throw (IX.) it into this cup (the same cup, c, under which a black ball has been left, on concluding the preceding trick). I take up this black ball (with the left-hand fingers). Now see that there is not a thing under this cup, B. (Slip in the white ball.) I throw it (IX.) into this cup, B. (In order to do this, take it again in the right hand.) I take this other white ball (with the left hand); you perceive there is nothing under this cup, A (slip in the black ball). I throw it (IX.) into this cup, A. (Take it again in the fingers of the right hand, to conceal it.) You will see that all the balls have changed colour. (Cover again each of the balls with its cup)



[With the three Balls which are under the Cups, two White Balls and a Black one, taken alternately from the pocket.]

### To make the Balls Change Sizes.

I take away the white ball which is under cup a. (You take it with the fingers of the left hand, and lift

the cup with the right, slipping in, at the same time, a white ball\* which you have taken out of your conjuring bag.) I make it pass again through the table under the same cup. (Take the ball again in the right hand, and in putting the hand under the table, you also slip it into the bag, from whence you take a black ball.) I take away this one (the one of cup B, into which you slip the same black ball), and I make it also pass through the table. (Take a white ball.) I take away the one under this last cup, A (slip in this ball), and I make it pass in the same way through the table, and here they are, all three. (Exhibit them, and cover them again with the cups.)



[With the three Balls under the Cups, two Black Balls and a White one, taken one by one from the Pocket.]

### **To make the Balls Pass from one Cup to another.**

Now you will observe that there are two white balls under these two cups, A and c, and a black one under this, B (lifting the cups). I cover the balls over again (covering each with its cup), and I make the white ball, which is under c, come out through the table (taking a white ball from the bag †); here it is (showing it). I put it back again into my pocket (doing so), and there is no longer anything under cup c. (While lifting the cup you keep hold of the ball beneath it with the little finger.) I take away this ball (the one under cup A) and make it pass through the table, and go under cup c (you take a black ball from the bag); there it is, passed! (You lift cup c to remove, show it, and slip underneath the black ball.) I put back this other white ball into my bag, and command the black one, which is under cup B, to pass under this one—you see it is no longer under this cup (you lift the cup, holding the ball beneath it with the little finger)—and there it is, already passed. (Raise cup c and show the ball; then take this ball in

\* You keep this ball in the hand by means of the third and little fingers, and lift the cup in the same way as when you slip in the balls. When putting down the cup afterwards, you at the same time bring forward the wrist, in order to introduce the ball. The balls ought to be stuffed with paper, or horsehair, so as to be very light and noiseless.

† To avoid the possibility of confusion or mistake, the different kind of balls should be in different compartments of the pocket.

the left hand, throw it in the air, catch it with the right hand, pretend to throw it a second time, and let it fall into the pocket. Lift your eyes and let them fall again, as if watching it rise in the air and fall again on cup B; raise this cup, under which was a black ball, and say) Here it is! it has passed once more through this cup.



To pull a little Ball (or Coin) out of the end of a Wand.

1st. The ball must be concealed in the right hand, between the third and middle fingers. (Fig. 47.)



FIG. 47.

2nd. You show the spectators the back of the hand

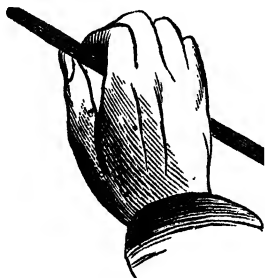


FIG. 48.

only, holding the wand carelessly in it, as in Fig. 48

3rd. With the forefinger and thumb of the right hand you press the forefinger of the left hand. (Fig. 49.)



FIG. 49.

4th. The instant after, the forefinger of the left hand strikes the table, while you raise the right hand some twenty inches in the air; this double movement leads the spectators to think that you have just made a great effort to pull something from the finger.

5th. You profit by the moment during which the right hand is raised, to draw the ball from the position in which it was, and exhibit it to the spectators in the position of Fig. 50.



FIG. 50.

6th. While thus showing the ball, lower the hand to precisely the place where it was at first, so that the audience may see the experiment, without having their eyes made to wander from the spot.



**To make a Ball Vanish.**

1st. Take the ball on the table, and exhibit it to the spectators, holding it as in Fig. 50.

2nd. Pretend to place it in the left hand, as in Fig. 51.

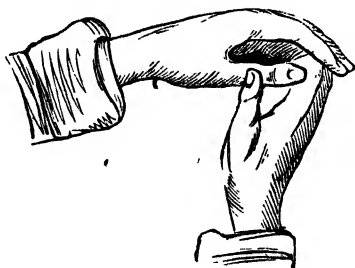


FIG. 51.

3rd. Instead of putting it in the left hand, make it roll skillfully until you can place it with the thumb, between the third and middle finger of the right hand, as in Fig. 47.

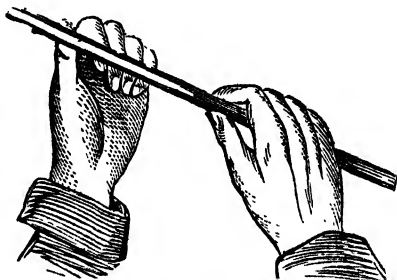


FIG. 52.

4th. Close the left hand, as if it contained the ball, and that you may conceal it without difficulty in the right hand, take up the wand, as in Fig. 52.

5th. Strike on the left hand with the wand, saying, "I order the ball to go off to the sunny land, where the men sing and chatter like women, and drink wine like water, but are never seen half-seas over, as they dread the ocean too much to cross the Channel. I mean, we

will send Monsieur Ball into France!" (If you now open the left hand, it will seem as if the ball had gone, in obedience to your order.)



**To find a Ball under a Cup previously Empty.**

1st. Take a ball, which you will conceal in the right hand, as in Fig. 47; holding the hand as in Fig. 48.

2nd. Beg the audience to observe that there is nothing under the cup, raising it two or three inches above the table and holding it as in Fig. 53. •



FIG. 53.

3rd. At that instant push under the cup the two little fingers; by this movement you will give a sudden impetus to the ball, which will fall on the table, but you will cover it so quickly by replacing the cup, that no one shall have had the time to perceive it.

After this preparation, if you employ the second means for making a ball disappear, ordering it to pass under the cup, the spectators will have a double surprise; for, on the one hand, they will not find anything in the left hand, where they have seen a little ball placed; and on the other, they will perceive a ball under the cup which, a moment before, was empty.

To make the Audience think there is nothing under one of the Cups, although there are several Balls really under it.

Sometimes you employ the means mentioned, *thirdly*, in the last trick, to discover one ball or several balls not immediately on the table, but between two cups, one placed in the other; you may then, by a trick which requires considerable sleight-of-hand, make believe that the balls are not there, although, in fact, they are.

In order to do this, it is necessary,



1st. That the balls should be put on the top of the first cup, and that it should be covered by the second and third, as in Fig. 54.

2nd. Put on one side, on the table, the third cup, which is the uppermost; take the other two in your hands, leaving them, for a second, one within the other, then *very rapidly*, slip the second over the third, holding the first a little on one side. By this means the balls pass from the first to the third, and are covered by the second.

3rd. Put the first cup aside on the table, and adroitly slip on to it the three balls, covering it with the second; this operation, repeated skilfully five or six times before the audience, will make them believe that the balls have disappeared, and you may afford them a new surprise by showing them that they are still there. This is what, in the terms peculiar to the art, is called *travelling post*, because the click click of the cups strikes the ear, like the hoof-beats of a horse in full gallop.



### To make Two Cups Pass into one another.

1st. Take two cups, the first in the right hand, and the second in the left, Fig. 55.

2nd. Throw the first with some violence into the second, Fig. 56.

3rd. Let the second fall on the table, keeping the first in your fingers.

The second cup will thus have the appearance of being kept in the hand ; and consequently the first must

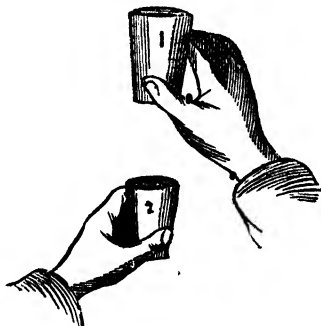


FIG. 55.

have passed through it. However, to prevent those who know the contrary from speaking, you must enforce their silence by yourself keeping up a perpetual chatter, and

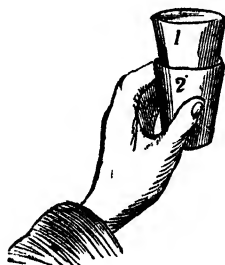


FIG. 56.

the more absurd it is the better, thus: "Ladies and gentlemen, when you are performing this trick, you must not forget to hold one cup fast in your hand, and let the other fall down. To acquire any skill, you must practise at least for fifty years, at about the rate of seventy hours a day. You will find the finest cut-glass

goblets the best to employ, as if you gain no other knowledge, you will at least learn the fact that glass is brittle," &c.

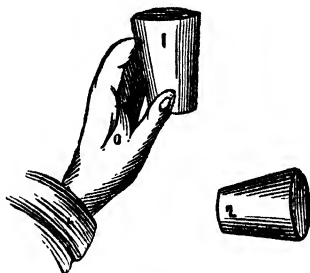


FIG. 57.



### To make the Balls under a Cup Disappear without Touching them.

1st. Take a conical piece of wood, with the top cut off, and fitting tightly into the bottom of a cup. To this you will fasten several sewing needles, seen in Fig. 58.



FIG. 58.

2nd. The bit of wood and the length of the needles must be such, and so fitted to the cup, that the points of the needles should almost (but not quite) touch the table when the cup is in its usual position.

3rd. When you ought to raise one of the cups, to show the balls beneath it, instantly overturn it, letting it fall upon your knees, as if by accident.

4th. Instead of replacing on the table the one which has just fallen, put on it that which contains the needles.

5th. Cover the balls with this cup, striking it with some force; the balls being of soft cork, the needles will penetrate them, and when you raise the cup, the balls will be lifted with it, and will have disappeared from the table.

To find a large Ball or an Orange under a Cup.

1st. Take in the right hand a large ball; which you hold with the thumb, as in Fig. 59.



FIG. 59.

2nd. In order that the ball should not be perceived by the spectators, you hold the hand carelessly, supported by the edge of the table, *see* Fig. 60.

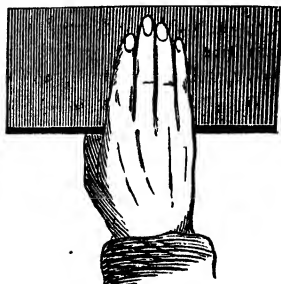


FIG. 60.

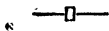
3rd. Raise the cup with the left hand, begging the spectators to observe that there is not anything underneath it: then suddenly take the same cup in the right hand, slipping in the large ball. The rapidity of your movements should be such that the spectator cannot see it put in; his attention being naturally further

diverted by having his eyes fixed on the table, to observe that there is nothing on it.

4th. Hold the cup for an instant in the air with the right hand, supporting the large ball inside it by the little finger.

5th. Place the cup on the table, begging the spectators to remember that it was empty a moment ago.

When, by these means, you have, unknown to the audience, put a large ball into the cup, it is easy to surprise them by showing this ball, which will appear to have come by magic.



To make believe there is nothing under the Cups, although there is a large Ball under each.

This art consists in lifting the cups successively, keeping up the balls with the little finger; but the best method of producing this effect is to have the balls filled with horsehair, so that they may be slightly elastic, and have them made just so large that being a little compressed in the upper part of the cup, they will sustain themselves by this pressure. You can then request the company to observe that there is nothing under the cup, lifting it perpendicularly with the left hand, without putting the little finger underneath; but, in replacing it on the table, you will use a little force, that the shock may set free the ball, which will astonish the audience by its presence, when you again lift the cup.

To Metamorphose Large Balls into Sponges, Wigs, Night-caps, &c.

There is nothing easier than to discover these different articles under a cup. You hold them, much compressed, in the right hand, and slip them into the cups, just as you would the large balls, at the same time you are begging the spectators to notice the large balls, which have just made their appearance. They will be so occupied with the marvel just presented to their notice, that they will not have time to remark that new ones are being prepared for them.

After this preparation, you take one of the large balls and put it under the table, ordering it to pass under a cup and metamorphose itself. You drop it into your lap, if seated, or into a pocket of the table, which the audience, who are astonished at finding these new arrivals under the cups, will be too much surprised to notice.

**To Change a Florin into a Penny, and vice versâ.**

You show the florin in your hand, but on merely closing and then opening your fingers, it is transformed into a penny. Shut and open again to show the silver coin, and repeat as often as desirable.

To do this, you must have a florin filed down and flattened to half its thickness, and the exact size of a penny. The penny must be treated in the same way; and they are then soldered together, so as to appear but one piece, which is either of copper or silver, according to which side is uppermost. You begin by exhibiting the piece on the ends of the fingers, as in Fig. 61.



FIG. 61.

Closing the hand, you naturally reverse the coin, and

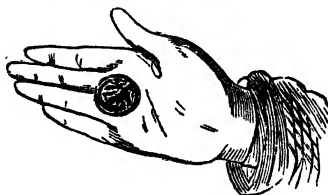


FIG. 62.

it reappears as a penny about the middle of the hand, as in Fig. 62.



If you then allow it to glide gently **towards** the ends of the fingers, it is clear that **you** need only to shut and open the hand a **second** time to make it reappear as a **florin**.

**Then** make the coin disappear by *palming*, or otherwise, and it is very easy to make it reappear again.



### To Run a Knife through one's Arm without Injury.

This trick consists in merely fitting to the arm a knife made for the purpose, like that in Fig. 63, the

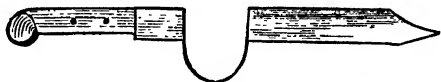


FIG. 63.

blade being divided into two parts, joined together by a spring of horse-shoe shape. When the arm is placed between the two halves of the blade, and the spring concealed by the cuff, it appears as if the arm were pierced. The performer makes faces and contortions,

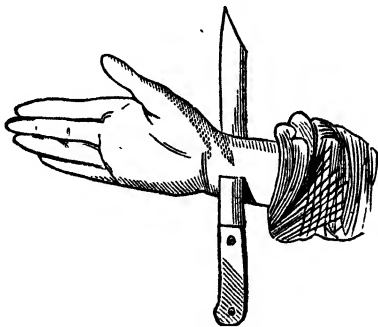


FIG. 64.

as if he felt the sharpest agonies, and shows his arm pierced, as in Fig. 64.

### Magic Boxes.

Have seven or eight boxes, turned out of boxwood, of such sizes, that the smallest will contain a coin or a ring, and that they will shut and fit one inside the other **easily**, all the boxes successively fitting into the next largest, while ~~the largest cover~~ also may contain all the smaller ones.

The bottoms and lids being then inserted one in another, from the smallest to the largest, you may, taking up all the lids together, and keeping them up by the aid of the finger, place them at once on the nest of boxes and close the whole by a single movement, as easily as if there had been but one.

Having put the boxes and lids thus arranged into your pocket or conjuror's bag in such a manner that they cannot be displaced, ask for a ring or coin from one of the company, taking care to have a similar one by you, concealed in your hand, which you will adroitly substitute for the one lent. Feeling in your pocket then, apparently for your handkerchief, or snuff-box, you place the ring or coin rapidly in the smallest box, and immediately shut the whole nest. Then drawing the box out of your pocket, you offer to make the trinket or coin pass into it, it being supposed that you are holding it in the fingers of the other hand. Pretend to make it pass into the box, concealing it quickly. Then tell the person who lent it to open the box himself and remove his property. This will cause him the more surprise, that, being able to open the boxes only one at a time, he will not be able to imagine, although aware that it is only a trick of sleight-of-hand, how in so short a space of time you were able to open and shut so many boxes. (*See also among the feats of Grand Magic.*)



### The Magic Funnel.

Let a tin funnel be made double, the interior surface, A, and the exterior, B, soldered together, so that the water contained within them can only flow out by a small hole made at C, where the inside surface joins the nozzle or pipe, D. The handle has a very small hole at

the top of it, which communicates with the empty interior of the funnel.

*Action.*—When you fill the funnel with water, stopping up with the finger the mouth of the pipe D, the water will also fill up the secret place between the two

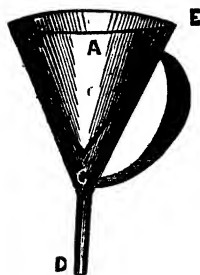


FIG. 65.

surfaces. After stopping up the hole C likewise with your finger, you open the hole D, and the water contained in the part A will run out. But the water between the two surfaces will remain there until you let in the air by lifting your finger off C. Then it will flow from the secret cavity until you stop it by again putting your finger to the same hole.

To perform the trick, you fill the funnel with water or wine, and holding it by the handle, stop the hole C with your thumb, and let the liquid flow out into a glass, from which it can be drunk. Take the awl, or bodkin (described with the "Magician's Dagger," which see), and pretend to pierce your forehead, or anything else, and instantly clapping the mouth of the funnel to your brow, unstopper the hole C, and it will seem as if the wine you catch and drink really issued out of your temple.

*Variation.*—Sometimes the conjuror uses a funnel from which the liquor flows or ceases to flow at his command. This is done by having a double funnel, i. e., two funnels, one inside the other, soldered together; the vacancy between the two hides the wine until you let it flow by letting in air by the little hole as before, and stop it by applying the thumb to the air-hole.

### Gun Tricks.

With ordinary firearms, you must make away with the real bullet, which has been marked by one of the party, and in its stead introduce into the barrel a mock ball of blacklead. When fired, it will leave the muzzle in dust, if the action of the ramrod should not have crumbled it.

### The Poulterer and Fowler in one.

By putting a double charge of largish iron raspings on a heavy charge of powder, a bird hit with it will have all its feathers cut clean off, as well as be killed.

### How to make a Marksman Miss a Target a yard off, and to Parry a Bullet with a Cane.

Some simple folk still believe in charmed bullets, thanks to our musical friend, Der Freischütz, and ladies are always frightened at a loaded pistol being levelled at a man.

Take a holster-pistol and substitute for its ramrod a rod with a soft wooden end, painted black. Have a steel tube, or other hard metal, made like a lining to the barrel, with one end stopped up, painted black. When the pistol has been properly charged with the powder, take it back and put it on your table, with the mouth towards you. Let one of a number of bullets be selected and marked. Meanwhile, slip the tube into the barrel, open end up. Make the person put in the wad, the bullet and the wad on top of that, and ram it all home yourself: that is, you ram them down into the inner tube, and your rammer going into the tube, you draw it out, and shake the ball afterwards into your hand. Of course take the greatest heed that no other bullet is put into the pistol, and let the marksman aim at a near-at-hand target. You hold the bullet in your hand with your wand, and let it fall at the report, or pretend to parry it with the same, or a cane.

**To Put Out and to Light Candles with a Pistol-shot.**

The candles to be experimented with must be whole ones, and freshly made. In the middle of the wick of the ones to be lighted, you must make a parting with a pin or metal point, so as to contain a small piece of the best phosphorus, inserted on a knife-point. Stand off a couple of yards from these prepared candles, intermixed with several lighted ones, and fire your pistol at the lighted ones, when the wind will blow them out, and at the same time kindle the phosphorus, which will ignite the others.

**To Put Out a Lighted Candle at long range with a Gun.**

With an ordinary bullet the feat is more often talked of than performed. If you are good enough shot to put a ball within several yards of a mark—and in these Rifle Volunteer days most of our readers will not be inexpert—you may safely undertake the engagement, with the precaution to use a bullet pierced clean through with a cold chisel in two cross cuts, so as to leave a crucial perforation, which will make enough wind to blow out a strong light.

**To Revive a Shot Sparrow.**

Ordinary powder is put into a gun; but, instead of bullet, you put in half a charge of quicksilver. Without hitting the mark, the bird will fall as stunned and benumbed as if set over a charcoal fire. Take advantage of its senseless condition to say that you will bring it to life again, and as it does recover sense, much surprise will be occasioned. Indian hunters use a little water or fine sand to kill birds without injuring their plumage, when so desired by naturalists, or for their own gains.

**To Pierce a Board with a Candle.**

Put a candle-end in a musket, and an ordinary charge of powder will drive it clear through a plank, not too thick, as quickly as a bullet.

### The Magician's Dagger.

We give here a sketch and description of a magic awl or bodkin, on the principle of which a knife can be made. The handle is hollow; and though the shank of the awl is straight like any other, the other half is a weak spiral spring, which will give way on the slightest pressure against the point of the awl. The performer makes as if stabbing himself, and, to all appearance, drives the steel up to its handle in his forehead, hand, or arm.



FIG. 66.



### *A Ballet in a Wineglass.*

#### The Dancing Coin.

Now then, why don't you dance! I really cannot say whether the butterfly who had spent all his summer honey followed the advice given him of old by the saving ant; but I may venture to assert, that if the command were given to a florin, it would instantly be complied with. You do not believe me, upon my word? Very well; will one of you lend me a two-shilling piece? This I will ring on my table, that every one may know by the sound of the metal that it is a genuine coin. It must have a ball-room, however. Oh! this glass will do for the purpose—a crystal palace, where it will be visible to

every eye. There it is! I'll beat time with my wand. The coin begins to jump about, and the faster the orchestra plays, the more briskly you may see it hop, skip, and jump, like an Italian ballerina—I may even say, like a *danseuse* of Florence.

*Explanation.*—When you let the borrowed coin drop on the table, take another, to which the end of a thread was fastened by a little shoemaker's wax, which, being black, is invisible to the spectators at a very short distance. The other end of the thread was fastened\* to the wand, and so, when you begin to beat time, the coin begins also to perform in the promised ballet.

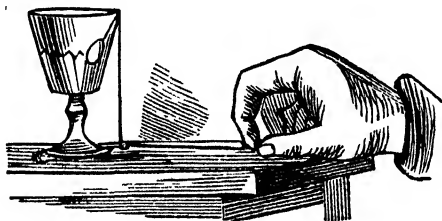


FIG. 67.

This end of the thread may also run down the table-leg, and be worked by your foot, or pulled by a confederate, or fastened to a waistcoat button, &c. (*See the Dancing Egg.*)



### The Invisible Coin.

Is silver a visible or invisible substance? What a singular question! You will reply, Certainly, silver is a visible thing. A good many penniless creatures, however, are of a different opinion; and, possibly, they are not altogether wrong, as we are about to show.

Will you kindly lend me a shilling, having first marked it, that you may know it again. Very well! This little handkerchief will serve for the experiment promised you. In the middle of this handkerchief, as you will see, I put the shilling, which you have marked with a

small cross. I am only folding the handkerchief that the shilling may be well wrapt up in it; you can have no difficulty in recognizing it by its shape. • However, I will improve upon that idea. There, sir, hold the handkerchief yourself, just above the little wad formed by the coin. You may touch it, it won't bite you, and convince yourself that it is still in its place. Now, I take the handkerchief by the opposite corner, I draw it towards me, unfolding it entirely; I then turn it over, shake it, and wave it in the air, to convince you that the coin has disappeared. The fact is evident. But did you see it go? No! *Ergo*, silver is sometimes an invisible body.

*Explanation.*—You have a handkerchief in one corner of which a shilling has been sewn in a hem, so as not to be seen. Appear to put the borrowed shilling in the middle of the said handkerchief; then, instead of this coin, which you conceal between the fore and middle fingers, you fold the handkerchief, making the little knob in the middle with the shilling sewn in the corner. When you quickly pull the handkerchief out of the hand which held it, the illusion is complete.

As to the marked coin, which it is easy for you to have put on the table, or in your pocket, you may make it reappear in a cup, a box, or anything else (*see Cup Tricks*), which adds to the effect of the present feat.



### The Magic Handkerchief.

There never was a party in which there will not be found some one who pretends he can discover, at the first glance, the secret of every trick performed by the conjuror.

I am constantly meeting with such a person, and they all resemble one another so exactly in their simplicity and self-conceit, that I have sometimes fancied it really must be the same person appearing over and over again; and, far from embarrassing me, his conceit and pretension serve me infinitely better than the intelligence of a colleague could do. I have given my unknown friend the nickname of Mr. Goody. Now, Mr. Goody having



asserted publicly and loudly that, in order to perform the trick of the invisible coin, I had an understanding with one of the company, who, instead of a coin, gave me a tin counter, or white wafer, or sugar lozenge, which it was easy for me to swallow—I mean to show, by means of the magic handkerchief, a second proof that silver is not always a tangible body.

I take another handkerchief into which I beg Mr. Goody himself to place a shilling. I fold the four corners over it, so that it is only entirely hidden by the last one. Mr. Goody could still touch, and perfectly feel the coin. Then seizing the handkerchief by one of its corners, I, as before, unfold, shake, and turn it over; and as in the previous trick, the coin disappears without any one having seen it removed.

Our friend has taken so much useless trouble in keeping his eyes wide open, that we will now assist him in guessing the secret.



FIG. 68.

*Explanation.*—Take a shilling and privately place a piece of soft wax on one side of it; then spread a pocket-handkerchief squarely upon a table, and taking up the coin, show to the audience the side that has no wax on it; then place it in the centre of the handkerchief, *waxed side up*, bring over the A corner of the handkerchief, as in Fig. 68, and hide the coin with it carefully. Press on the coin very hard with your thumb, so as to make

it stick to the handkerchief; when you have done this, fold over the handkerchief into the shape of Fig. 69.

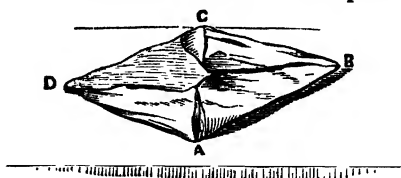


FIG. 69.

Again fold over the corners B, c. and D (Fig 69), leaving the A corner, towards you, open. Having done this, take hold of the handkerchief with both hands, as represented in Fig. 70, at A, and sliding your fingers along the edge of the same, it unfolds, and the coin meets your right hand; then carry away the coin, lift up the handkerchief, shake it, and the coin will have dis-

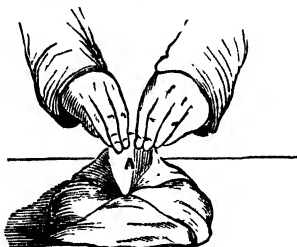


FIG. 70.

appeared. In order to keep up the belief that the coin is still in the handkerchief after being wrapped up, you can drop it on the table, when it will sound against the wood.

—□—

### To make a Coin Stick to a Wall.

Take a shilling, and on the edge of one side dig up a small pointed piece with scissors or a knife, so that a little wedge of the metal sticks out. By pressing this against a door or soft wood, the coin will cleave mysteriously to the upright surface.

*To Kill the Time between Dinner and Dessert with a Knife.*

**The Knife in the Decanter.**

At all dinner parties there is a period when, appetite being satisfied, we have only to gratify our taste for kickshaws. Before attacking the dessert, we generally find it expedient to make a pause, to take breath, as it were, before renewing our exertions "over the walnuts and the wine." This pause is apt to appear long, either because the general conversation has ceased, or that the chat of those who are sitting side by side has degenerated into tedious commonplaces, no one knowing what to do with himself.

Just to show that time does not hang on *your* hands you draw the decanter of water before you on the edge of the table; then, between this edge and the bottom of the decanter, thrust the rounded point of the blade of a dessert-knife, just far enough in that it will be held out horizontally beyond the table.

All eyes will be turned, like so many dots of the note of interrogation, towards you. Your trifling preparations have given a subject of interest to the guests,

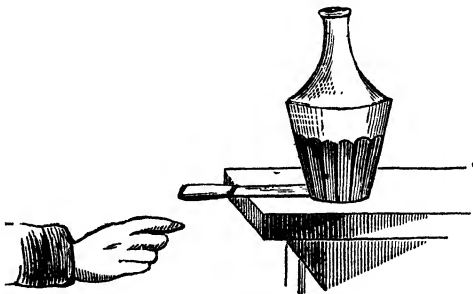


FIG 71.

who are no longer counting the seconds till the dessert appears.

Reply to any questions put to you, that you are about to make the knife spring into the decanter with one finger only, at one or more trials, according to the skill you may chance to possess.

Your materials being thus placed as we have described, and as seen, strike a sharp blow with the forefinger below the end of the handle of the knife, which will spring up and describe a half-circle in the air, in the direction of the mouth of the decanter.

By a little practice, your blow will be given with such dexterity that the knife will fall, handle downwards, in the decanter.



### The Dancing Egg.

On some eggs being brought you, place among them one empty shell, to which is fastened a long hair with a bent pin (like a fish-hook) at the large end. You will require your wand, or borrow a light, short cane, and as you move about, hook the bent pin in your coat. Place the plate of eggs on the table before you, and put the wand under the hair, when, on drawing back the body and thrusting the hand forward, the egg will run up the wand, and can be made to caper very amusingly. If you can procure a length of raw silk thread, it will be found stronger and better than a hair.



### The Egg Bag.

This is one of the easiest and most simple tricks; in fact, apart from the talk of the conjuror, next to nothing. It consists in producing eggs out of a bag in which, an instant before, nothing could be seen, as proved by your turning it over several times, inside out, and so forth.

"Nothing in the world is more convenient than such a bag as this!" says the conjuror. "Suppose that in travelling you stop at a hotel where there is nothing to eat, you have only to beg your invisible hen to lay two or three dozen eggs, and lo! there you have eggs in ham-lets, roasted, fried, boiled, poached, or in custard. And talking of hamlets, I must tell you that my wife plays 'Oh, feel you!' so that I have been obliged to handcuff her, to prevent her from using her hands to cuff me. She is so extravagant, that I can only hinder

her from throwing my money out of the window by turning her out of doors. I married her because she is but a mite of a woman, trusting to the proverb, 'little and good;' but, alas! I was mightily deceived, and can only sadly feel how *little good* there is in her! 'What fools men are to tie with their tongues knots that they cannot undo with their teeth!'

"But while I have been telling you my domestic troubles, the hen has been laying an egg."

You take an egg out of the bag, and turn it about to show that it is again empty. Continue in the same strain until you have brought to light six or eight eggs.

*Explanation.*—The bag is really composed of *two* bags, a foot long and six inches wide, of some dark material, the two sewed together at the edge, so that one may be inside the other, and appear the same if turned inside out. Or you can add a number of little pockets with flaps, fastened down by a button and loop, about two inches apart, *between* the two bags, one side of the pocket sewn to one bag and the other side to the other. Slits an inch long through both bags, just above the pockets, enable you to put your thumb and finger through to open the pockets. One article should be put in each pocket, and covered over. The bag may now be turned inside out any number of times at pleasure, and it will appear to be empty, even close to your audience. You can now bring forth any number of eggs, much to the general amusement.

Use empty eggs, because less liable to break, and because so light that they may lie concealed at the bottom of the bag without weighing it down. One real egg can be broken before the audience, to satisfy their suspicions.

—□—

### To Cut, Tear, and Mend a Marked Handkerchief.

You request two persons in the company to come forward. Put into their hands a handkerchief, which they are to hold by the four corners. Then procure several other handkerchiefs from the audience, and as you receive them, put them into the first, to make a parcel of. When you have accumulated a dozen, the two

persons who hold the heap shall desire a third spectator to draw out one at hazard. He is to examine the mark and number (if there be any), and to cut off a little bit with scissors. Others may then also cut off pieces, if they wish, and finally the handkerchief is torn to pieces.

Collect all these shreds and rags, on which you throw some spirits of wine; fold them up; tie them strongly with a ribbon, to compress them into a small compass, and put them under a glass, which you warm with your hands. In a few seconds you remove the handkerchief to fold it; every one recognizes the mark, and the audience are amazed not to find the slightest tear in it.

*Explanation.*—Your confederate among the audience, having two handkerchiefs precisely similar, has previously given one to a confederate behind the curtain, throwing the other on the stage for the performance of the trick. You manage that this one shall lie at the top of the others, although pretending to mingle them by chance. The person to whom you apply to select one naturally takes the uppermost, but if he will not do so, you beg him to turn them topsy-turvy, pretending to make the trick more difficult, and having done so, you replace at the top the one required, and apply to a person with a less foxy aspect.

When the handkerchief has been torn up, put it under a glass on a table near a partition; there is a trap (for which see the explanations upon the Magician's Table) under it, which lets it fall through into a drawer, your confederate passes his arm inside the table, which is hollow, and puts a second handkerchief where the other had been.



#### *A pleasant end to a Game of Backgammon.*

#### **The Dice.**

Some time ago I met a friend, whose usually good-humoured expression was changed into an air of vexation and weariness which astonished and alarmed me. I asked him if the arrangements for his marriage—for

he was engaged to a wealthy and beautiful young lady—had been altered by any unforeseen circumstance.

"Not at all!" he replied, "and I should be the happiest of engaged men—past, present, or to come—if it wasn't my misfortune to detest backgammon."

"Well," I answered, laughingly, "I hope you are not about to marry a draughtboard, are you?"

"No! but my intended is the daughter of one and the niece of another most estimable and wealthy land-owner, whose passion for that game is such, that they can't spend an evening without one of those never-ending games which torture my nerves and make my flesh creep. The result is, that instead of being pleasant to my *fiancée*, I make horrible faces, and pay her the most senseless compliments. You are a magician! Can you not aid me?"

"Maybe I can," I replied. "Will you present me to your future father-in law?"

"Certainly," he answered; "I am going there to-night, and will take you with me."

My unfortunate friend kept his word, for a few hours afterwards I found myself a welcome guest in the house of his betrothed. Shortly afterwards the father and uncle sat down to a game of backgammon. My friend gave me a melancholic glance. I took up the dice-box, and let the dice fall from it once or twice.

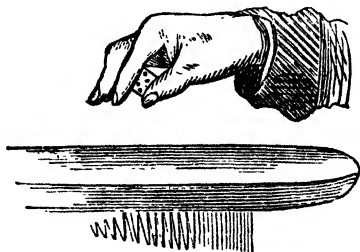


FIG. 72.

"Gentlemen!" I observed, as the father was about to take them up, "you use very queer dice there."

"I don't see anything peculiar in them," replied the uncle, who was winning.

"Permit me to alter your opinion."

"Willingly."

"What is the number of your throw?"

"Cinque-deuce."

I then took the two dice horizontally, between the finger and thumb, so that forming a parallel with these fingers, and between them, they should have at the top *cinque-deux*, as they had when on the table. I then raised my wrist to show the spots marked on the lower side. *Four-quatre three-trois*. (This is not essential, as the numbers may vary.) I then lowered my wrist again, to show that *cinque-deuce* were still uppermost. I begged one of the old gentlemen to place his finger under the dice.

Once more I showed the under sides, and they were *cinque deuce*, instead of three-four. My two spectators looked at me in amazement, begging me to do it again, which I did in the same manner with six and three at the top, four and two at the bottom; then one and four at the top, and so on.

The papa and uncle wanted to know how I performed that trick; and for that evening, at least, backgammon was forgotten.

The next evening, again, the dice-box was forgotten while they were entreating me to reveal my secret; and they passed several subsequent evenings in amusing their friends with it.

*Explanation.*—When you raise your wrist the first time, to show the lower face of the dice, change it, by an imperceptible motion of the thumb upwards, and of the forefinger downwards, so that the top faces take the place of those at the left sides. Lowering the wrist, afterwards, to show that the top numbers are still the same, you bring them back into their place, by a motion of the two fingers, contrary to that by which you brought them to the left. The dice are then in their natural position, and you will show the faces really corresponding with the upper sides, for they will have taken, at the bottom, the places of those you have just exhibited.



### The Blindfold Sorcerer.

#### *A Trick with Dice.*

After having taught my friend's future father the trick just described, I became quite a favourite with him, and was frequently invited to his house. One evening, after showing my trick to some of his friends, the old gentleman begged of me to exhibit some other experiment in white magic, and being anxious to repay his hospitality, and at the same time to offer some further evidence of my skill, I at once complied with my host's request. "Now, my dear sir, I pray you blindfold me." "That I will do, Mr. Magician, and I fancy that it is now all night with you." "It is indeed, sir," I replied, "for I cannot see an inch before my nose and now, sir, I will proceed with my experiment. Be good enough to take these three dice and throw them on the table. You have now done so, I know by the rattle on the marble. Now add together the uppermost spots upon the dice. You have done as I requested, very well. Now, you see, sir, that I pick up one of the dice, and hold it towards you. Pray add the number of spots on the face of this die nearest to you to the sum you have just obtained. Once more you have obliged me. Now I throw this die upon the table. Do not be nervous, dear sir, for I am blindfold, and besides, I have had my back towards you all the time, and thereby have sacrificed my politeness at the altar of my honesty. Pray observe the number of spots uppermost on the die I have just thrown, and add them to the number you have already obtained; and now, esteemed sir, remove the bandage from my eyes, and permit me to see the dice as they lie on the table; and, in return, I will announce the total amount of the spots you counted." This I did, much to the astonishment of the old gentleman and his friends.

*Explanation.*—The whole secret of the trick consists in showing the reverse side of the die when you pick it up; for instance, if the upper side is six, the reverse is ace; if three, the reverse is quatre; and when added together always makes seven (7). Consequently, by

adding seven to the number of spots uppermost on the dice, when you are permitted to see them, you will infallibly get the correct total of the amount of spots added together by your audience.

*Example.*—We suppose that the uppermost sides of the three dice, when thrown, were as follows: five, deuce, six, making 13 spots in all, and then the die taken up was six; now the reverse of this side is the ace; consequently, that was the number added to 13, making 14. We will again suppose when the die was again thrown down, tray was uppermost, which being added to 14, gives 17 spots; and the last condition of the dice as they remained on the table was as follows: five, deuce, three, now add six and one, and you have 17 spots, the total number.

### Blindman's Buff with Dominoes.

"Are you a domino-player, Mr. Goody?"

"Sometimes, sir; but just now I prefer watching your tricks."

"But you understand the game?"

"So well, that I was once requested, and by a very celebrated conjuror, sir, to play a game with his learned dog. A fact, sir!"

"Then may I ask the honour of a game with you?"

"With great pleasure, sir."

"I am much obliged, Mr. Goody. Now mix the dominoes well, sir. You have eight, I think. You begin."

"I don't know how it happens, but it always is I who begin. Double cinque!"

"Excuse me, sir, but it is unnecessary to call out the number; and you play in the old method also, with the pips uppermost. Oblige me by making the black the upper side. I will do the same."

"You are certainly more learned than even the learned dog, Mr. Conjuror; still you cannot reckon your game at dominoes at blindman's buff."

Now then, dear reader, let us prove that our worthy

shadow, Mr. Goody, was mistaken. We will continue together, if you please, the game he has given up.

You seat yourself opposite to me. I place one of my feet on one of yours. You do the same with the other. This simple arrangement being made without any one seeing anything mysterious going on, the game begins. The pressure of your foot on mine shows the number with which you begin, without the possibility of a blunder, although playing the dominoes face downwards. My foot speaks the same intelligible language to you, while perfect quiet on either side indicates a blank.

The game finished, we turn the dominoes over, to show that the numbers have been played with perfect exactness; and every one but Mr. Goody, who, of course, pretends to guess, asks us to explain the secret, which, perhaps, it would be wise to keep as long as we can.



### The Domino Oracle.

Twelve of the dominoes used by Mr. Goody being placed in a circle, you inform any gentleman present, that if he will think of one of the dominoes and remember it, you will point it out to him. Now, supposing the double-deuce is the domino selected, tell the person choosing it that you will count around the circle, up to twenty, *including the number of pips on the selected domino*, when he must tell you to stop, and your finger will then rest on the chosen domino.

*Explanation.*—The dominoes are arranged in order thus: the ace-blank, double-ace, ace-two, double-deuce, two-three, double-three, three-four, double-four, four-five, double five, five-six, double-six, from right to left. "You count carelessly around, 1, 2, 3, 4, 5, 6, 7, on any of the dominoes; but at the eighth count always manage to point to the *double-six*, and after that continue counting around *to the right regularly*; this is the key of the trick.

*Example.*—Still, supposing the double-deuce selected, you count and point at the dominoes *promiscuously* during the first seven counts; but at the eighth count

point at the double-six, and continue to the right on the six five, double-five, and so on in succession, until arriving at the double-deuce, when being told to stop, because by that time you will have counted sixteen, you add the spots on the domino chosen and have twenty. This rule holds good no matter what domino happens to be selected. The reader of course must not count out loud, or appear to count mentally, but pretend to be only pointing at the dominoes by chance. Let the person who selects the domino appear to do all the counting.



### To See and Count Dominoes through all Obstacles.

It has long been believed that the eyes of a lynx were so piercing that they could penetrate even through stone walls. Now naturalists deny that it is true. Why? Perhaps only because they formerly asserted it. But no one has asserted, even in remotest antiquity, that if a human being has his eyelids brushed with a lynx's tail, it will enable him to see, for a few seconds, even through the most opaque substances.

As I do not know whether you will believe this assertion on my bare word, and a countryman of mine made me a present of the tail of a lynx, which he caught somewhere in *fur-rin* parts, we will see how much truth there is in this account of a phenomenon you probably never heard of before.

For the experiment we take the dominoes now in our hands.

I will lay them in a line, one beside another, on their faces, so making one black line. Now I will go into the next room, with my eyes as closely covered as you may desire. In my absence, you may take from the line the number of dominoes you please, *provided you take them from that end which is now at my right hand*, and place them at the opposite end, so that, except for the change in the places of the pieces, the line is just the same as before.

At my return, without unbandaging my eyes, I will tell you exactly the number transported from one end to the other, for I shall have seen everything through

the wall and the handkerchief which has covered my eyes. I will do more. From the midst of these dominoes, of which you have changed the position, I will draw one which, by the addition of its spots, will tell you exactly the number which you took from right to left.

*Explanation.*—The lynx's tail is not essential, if after the change has been made you count with your fingers—if your eyes are bandaged—the dominoes *from left to right*, as far as the thirteenth. The spots on this thirteenth will invariably represent the number of dominoes whose position has been altered. But, in forming the line originally, you must have arranged the first thirteen dominoes, *beginning at the left*, so that the spots on the first form the number *twelve*; of the second, *eleven*; of the third, *ten*; and so on, up to a double-blank, for the thirteenth and last. You place the other dominoes afterwards, in the order in which they happen to present themselves.

In performing this and many other tricks, employ any devices you can think of to puzzle those who may try to fathom them.



### *Extremes.*

#### To Guess the two Ends of a Line of Dominoes.

Our tormentor, Mr. Goody, calls out, "I know that trick perfectly. Extremes meet! that's the idea."

His neighbours do not understand at all, but he takes their amazement for admiration, and blushes with pleasure, his countenance brightening up with a proud smile, like a poppy in a field! Perhaps the gentleman will allow us to add (since we have begun on the subject) a few details to his lucid explanation.

We will make use of our dominoes for the last time. You have them shuffled together as much as any of the company may desire. You propose to leave the room in which the audience are assembled, and you assert that from your retreat, be it where it may, you can see, and will be able to tell, the two numbers forming the extremes of a line composed of the entire set, according

to the rules established for laying one domino after another.

All the magic consists in taking up and carrying away, unknown to every one, one domino (not a double) taken at hazard; for the two numbers on it *must* be the same as those on the ends of the two outer dominoes. You have then only to consult this very innocent conjuring book, to pass for a skilful magician. This experiment may be renewed *ad infinitum*, by your taking each time a different domino, which of course changes the numbers to be guessed.



### To Find Six times Thirteen in Twelve.

Place your figures thus:—

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,  
and, taking always the first and the last figure together,  
you say,

1	and	12	make	13	
2	„	11	„	13	
3	„	10	„	13	
4	„	9	„	13	6 times.
5	„	8	„	13	
6	„	7	„	13	

### Tontine, a very pretty Game at Cards, with which a large Party may be Amused.

A game learnt in a moment, and played with the fifty-two cards. After every person has taken a certain number of counters—say twenty—each one puts three into the pool, and the play may be begun. Some one cuts and deals one card, face up, to each person; this is the foundation of the game. He to whom a king comes takes three counters; a queen, two; a knave, one. The ten neither takes nor gives; the ace gives one to the next neighbour of the person who holds it; the deuce gives two to the second player above him; the three gives three to the *third* above. For the rest of the cards, the holders pay one or two counters, according as they are even or odd; the four, two; the five, one; the six, two; the seven, one; the eight, two; the nine, one. It will

be seen that twenty-four counters are drawn by the players; twenty-four are in circulation, and thirty-six are in the pool. Thus, each time that a round is played, twelve counters leave the hands of the players. When any one has no more counters, he returns his cards, and is said to be "*out*." But he often comes in very speedily, since if an ace happens to come to his next neighbour below, that neighbour has to give him a counter; he who is two places below him will give him two, if a deuce comes to him; and his third neighbour below will have to pay him three, should a card with that number of spots be dealt to him. This rule causes many fluctuations of fortune. Finally, the pool belongs to him who has most counters left: but many changes take place before this catastrophe happens; and it is often the player whose circumstances have been most desperate, and who, perhaps, has been two or three times *out*, who wins the game. The excitement and constant change make this a very amusing game.

#### To make a Straw Cross Turn, by Pouring on it Two or Three Drops of Water.

Cut a finger-length of straw, and turn the end secretly before announcing this trick. When it is turned, with another bit of straw make a cross, which you must stick in a crack of the table. When you pour water on the top of the straw, it penetrates into the bend you have made, which turns; and the cross has the appearance of turning, although in fact it is fixed.



#### Permutation Table.

Take ten blank cards, on each of which you have written one of the figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 0.

Take these ten cards in the left hand, as you do when shuffling a pack. Slip off, without altering their order, the two first cards, 1 and 2. Put above them the following two, 3 and 4; and under these four the three following, 5, 6, 7. Then, at the top of the pack, 8 and 9;

with the 0 card at the bottom. You can shuffle them in the same manner several times. At each new shuffle you will have a different order, notwithstanding which, after a certain number, they will get into the same order that they held before they were shuffled, as may be seen in the following table, in which, after the seventh shuffle, they return to their first arrangement:—

1st,	1	2	3	4	5	6	7	8	9	0
1st shuffle,	8	9	3	4	1	2	5	6	7	0
2nd,	6	7	3	4	8	9	1	2	5	0
3rd,	2	5	3	4	6	7	8	9	1	0
4th,	9	1	3	4	2	5	6	7	8	0
5th,	7	8	3	4	9	1	2	5	6	0
6th,	5	6	3	4	7	8	9	1	2	0
7th,	1	2	3	4	5	6	7	8	9	0



### The Link-boys.

Place two persons on their knees, opposite to each other; each is to kneel on one knee, with the other leg in the air. Give to one of them a lighted candle, requesting him to light that of the other person. This is exceedingly difficult to do, both being poised in equilibrium on one knee, and liable to tumble down at the slightest disarrangement of position.



**To Draw two Figures with Crayon on a Wall, one of which will Light a Taper, and the other Extinguish it.**

Draw with crayon two figures on the wall: any you please, such as a man's head and a woman's. At the mouth of one you put a little gunpowder, which you fasten on with mouth-glue; at the mouth of the other a bit of phosphorus, fastened in the same way. When you take a lighted taper near the mouth that has the gunpowder, the explosion extinguishes it; then taking it near the phosphorus while warm, it lights itself again.





**Two Dice being thrown on the Table, to find out the Spots on them without seeing them.**

Tell the person who threw the dice to add *five* to double the number of spots on one of them, and then to multiply the whole by the same number, 5. Make him add to this product the number of spots on the other die; and ask him to tell you the amount of the whole. Subtract *twenty-five*, which is the square of the number five, and there will remain two numbers or figures, of which the one that represents the tens indicates the number of the first die, and that of the units will be the amount of the second.

*Example.*

We will suppose the throw was 2, 6.

The double of the first is	.	.	.	.	.	.	.	4
Add	.	.	.	.	.	.	.	5
								<hr/>
Total	.	.	.	.	.	.	.	9
Multiply by 5	.	.	.	.	.	.	.	5
								<hr/>
Product	.	.	.	.	.	.	.	45
Add the spots on the second	.	.	.	.	.	.	.	6
								<hr/>
								51
Subtract	.	.	.	.	.	.	.	25
								<hr/>
								26

We know that these two figures, 2 and 6, were those of the throw.



### Piquet on Horseback.

Two persons travelling on horseback, and tired of their journey, may amuse themselves and beguile the time by counting up a hundred, as in piquet, without cards, agreeing that he who first reaches 100 shall be considered to have won; and that, in counting alternately, each is at liberty to add whatever he pleases, provided it does not exceed 11.

You must first understand the peculiar properties of the number 11, which, multiplied by the terms of arithmetical progression, 1, 2, 3, 4, 5, 6, 7, 8, and 9, always gives, as a product, two similar figures.

*Example.*

11	11	11	11	11	11	11	11	11
1	2	3	4	5	6	7	8	9
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
11	22	33	44	55	66	77	88	99

In order, then, that the one who names the first number should be able to arrive first at 100, and that his opponent should not be able to do so, he must bear in mind all these products, and count in such a manner that he should find himself always one unit above these products, having taken care to name *one* first. His adversary being debarred from taking a higher number than *ten*, he cannot get to twelve, which the first speaker must make up, and afterwards the numbers 23, 34, 45, 56, 67, 78, 89. When he has reached this last, whatever number the opponent may choose cannot prevent him from reckoning 100 first, and consequently winning the game.

To ensure winning, remember the numbers to be made in the retrograde order also ; 89, 78, 67, 56, 45, 34, 23, 12, 1.



**Mode of Printing a Card on a White Handkerchief.**

Before performing this trick, you borrow several handkerchiefs, under different pretexts, and keep them at least five minutes on your table ; put your own among them, unobserved, in order to be able afterwards to take one away, and still leave the same number, as you will not be able to make use of your own. Then give a pack of cards up to be examined. Under pretence that you do not wish to be present while the shuffling is going on, you go into another apartment, where you have a copper stencil-plate, representing the eight of diamonds or hearts, or a club or spade, without any border or ornament. Any card, indeed, will do, except the ace or a picture card. With a stencil-brush print the card lightly in the middle of the handkerchief. Red cards are printed with vermilion, moistened with mouth-glue; the black is produced by charcoal, mixed into a liquid in the same way. When the pack has been shuffled,

you return all the handkerchiefs, with the exception of the printed one, which you place on the table, spreading out your pack on it. When you recognize your card, put it on the top of the pack, making the pass afterwards, so that it will be in the middle. You take it out, and burn it; then load a pistol with powder only, and having assured yourself that the card is completely burned, you put the ashes into the pistol, fold the handkerchief so that the impression is on the inside, fire off the pistol, and at the moment of the explosion open the handkerchief, when the card will appear on it.



### To Untie a Douole Knot without Touching it.

Take a handkerchief of *silk*, as it slips more smoothly, and after having tied "a granny's knot," as in Fig. 73, tighten it a little by drawing slightly the two upper ends;



FIG. 73.

then continue to tighten it much more, pulling vigorously at the first corner of the handkerchief, and as this end belongs to the same corner of the handkerchief, it cannot be pulled much without loosening the tortuous line of the knot, to become a straight line. In fact, the other forms a slip-knot on this end, which can be drawn out without disturbing the *form*, or apparent security of the knot, at the moment when you cover it by putting over it the rest of the handkerchief. That the spectators may not imagine it to be a running knot, you begin, when

about to propose the trick, by making two or three real and tightly drawn knots. Wrap them well in the centre of the handkerchief, and boast of being able to undo the knot without touching it, defying any of the company to do the same.

If any one accept the challenge, prove to him his imprudence by showing him that he cannot undo them with one hand even touching it; but if every one agrees that it is difficult, or impossible, you address some one in the company, saying, "You think, perhaps, sir, that this knot is already undone? I will prove to you the contrary." Then undo the knot, and the undoubted difficulty shows that this, at least, was not a deceptive knot.

The sort of slip-knot you must then make (beginning the trick over again), must in appearance be like the one you have just undone, and is, in the eye of the audience, a downright Gordian knot. It is not surprising, therefore, that he who undoes it instantaneously, and merely by a touch of his thumb, while he appears to wrap it up in the folds of the handkerchief, will obtain the applause of the spectators, when he afterwards asserts that he has undone the knot without touching it; and contents himself with shaking the handkerchief, from which every trace of the pretendedly fast knot disappears. Sailors term such slip-knots *granny knots*, because only an old woman would be likely to fasten a cord in such an easily unloosened manner.



### To Knock your Head against a Door without Injury.

"Ladies and gentlemen, would you like me to teach you my secret for making impromptu verses? You have only to rub your forehead well, not with your hand, as Horace did of old, but by thumping your head against a wall." Then seem to knock your head three or four times against a door, and put your hand to your forehead, as if to deaden the pain produced by the violence of the blows. But you must do something more than merely touch the door with your head. At the same moment that you make the movements as if to knock your forehead, you ward off the blow, by the aid of the

left hand, grasping the door at about the spot you pretend to strike, while the closed right hand, concealed from the audience, strikes the other side of the door.



FIG. 74.

The correspondence of the head appearing to strike at the same time as your hand strikes the blow, produces a perfect illusion.

This is similar to the means by which clowns, acrobats, and stage players, when falling, make the audience believe their heads have struck the stage, when really the blow was of their open hand at the exact time when the supposed collision seemed to occur.



### The Melting Coin.

Money melting in one's hands is, unhappily, one of the oldest and most common occurrences possible; but there are no hands in the world—not even a magician's or a supernatural being's—in which this phenomenon can be realized so rapidly as in the magic handkerchief, which we will, once more, call into play.

One of the company has thrown a shilling into our handkerchief. To prove that it really is there, we take the handkerchief by the four corners. It appears like a long bag. Then, with one hand, we take it up by the

middle of the lower end (the centre along which it is folded). Held thus, the handkerchief forms a sort of doll, the coin, imprisoned more closely than ever, being the head, and the four ends, falling below the hand, make the flowing robes.

Now, who can deny the magician's power who, in a single second, can so melt the silver that it will pass through the imperceptible meshes in the silk which incloses it? We are about to give, to the most in-



FIG. 75.

credulous, this proof of an almost illimitable power. You, madam, appear to wish that the coin should be wrapped still more closely. I shall esteem myself very happy, madam, in giving you all possible satisfaction. I correct myself—to do what is simply *possible* is not enough. You, ladies, are all magicians, by your intelligence or beauty, or both combined, and if magic cannot achieve for you something more than merely what is possible, you would think, with some reason, that the conjuror's wand is less powerful than your fan, to say nothing of those bright eyes which have struck out of our lexicons the word *impossible*. Here, then, is the coin, really done up in the folds of the magic kerchief. Will you, madam, order it to do its duty? Nay, better still; I beg you to hold it yourself, at the same place as I did. Can you feel the coin? Is it still in its silken prison? Yes.

Ah, madam! you are one moment too late! The shilling has already melted, and gone through the handkerchief. Here it is free, and recoined, having made its

way through the folds in which you had obliged me to inclose it. Well! *this* is wonderful! It has the very same mark made by Mr. Goody on the coin we used in one of our other tricks! Mr. Goody, show your gratitude to madam for giving you back your shilling, by telling her whence it has come.

*Explanation.*—The new coin came from our pocket, whence, while chatting, we drew it quietly, and instead of putting it in the *inside*, we enveloped it really on the *outside* of the place whence the first was inclosed. When we begged a lady to hold this, we slipped our hand with the first coin under the one that was to take its place, and letting the hand glide down the inside of the handkerchief, removed the “melting coin.”



*To win a bet, and yet make the loser laugh.*

#### The Half-Sovereign in the Wine-Glass.

“For my part,” remarks Mr. Goody, “I never perform a trick without making every one laugh. Lately, I tried to perform the feat of the knife in the decanter. At the first attempt I broke the decanter, which amused the whole company greatly. The second time I was



FIG. 76.

more fortunate, I only broke the knife. But they laughed still more.”

"I will place this half-sovereign in this wine-glass, as you see. Now, will you bet that you can make it come out, without touching either? As far as *feats* go, I would bet millions. Gentlemen, will any of you bet sixpence that I can perform this trick of the gold coin and the glass? The wager is accepted. Then I will begin. But what in the world are you about? Going to kick the table to make the glass fall and break, and the coin roll out! Oh, no, no, that's not the way. You must not break everything, sir. Confine yourself to decanters and knives; we do not want our glasses broken also. You should be on the railways to manage the *breaks*. But I shouldn't wonder if you were a china and glass dealer, and like to help on your trade! But now permit me to show you a plan as efficacious as yours, though somewhat less expeditious. Put the gold piece in the glass, and over it a shilling. Now then! Be good enough to blow very hard into the glass.

"There you are! The coin flies out and strikes you on the nose; and here it is actually on the table, without my having touched either it or the glass!

"The effect would have been precisely the same with a sixpence under the shilling."

### The Feather Trick.

Our magic handkerchief has only to be shaken to cover the room with magnificent plumes. Behold! a



FIG. 77.

red feather—a white—a blue; shaken again. a tri-colour!



Whence such an avalanche of plumes? No one can suspect the performer of hiding them in such a quantity; yet he does so, and easily. You prepare yourself by taking off your coat, and after laying two or more vulture's feathers—as they are most elastic, do not break, and puff out as soon as the pressure is removed—along your arms, holding the quill end in your hands, you put the coat on again. In throwing the scarf over one hand, you catch hold of the plume, and draw it out. Its great size forbids any idea of where it had really been hidden.



### The Inseparable Columns; or, the Pillars of Hercules.

There are shown to the audience two sticks of wood, about eight inches long, terminating at each end in half balls, so that when joined by their plane side, the two become a rod tipped with balls. A cord runs through the two balls of one end, which can be pulled through on one side and then through on the other, to prove that it can freely slip. The performer takes up a knife or pair of scissors, and thrusting the blade between the pillars, cuts the string connecting them, and they are not



FIG. 78.

only entirely parted, but the audience can see the ends of the two pieces of string where cut. Nevertheless, bring-

ing the pieces together, the mere touch mends the string, which can be pulled through on either side as freely as before. A spectator can be invited to let the instrument imprison his nose, through which the string can still run.

*Explanation* — To obtain the result, there is as little need of mending the string as of cutting it, for the simple reason that it does not run through the balls as it appears to do. There are really two strings; the end of one runs in at the outside of the hole in one of the balls, to half-way, where it goes down the handle, by a hollow, to the lower end; through the lower end into the lower end of the other handle, where it is wound to a reel or bobbin. The other string is similarly led through the second handle, and likewise to the reel, but so that when the string to the left is pulled out, it, in unrolling off the reel, winds up the slack of the opposite string, and *vice versa*, so that the one coming forth in the same degree as the other goes in, it all appears to be one continuous string. Or, more simple, the string can pass in at the outside of one ball, down the centre of its handle, and up into the other handle, and out of that ball. But in these cases the pillars are not separable. To do so, the strings terminate, as before, on reels; but one reel at the lower end of one handle has a tooth or cog in it, while the other reel has a hole in it, which the cog catches into when the two handles are laid together; therefore, the pulling of one string, in turning the toothed reel, makes the other reel revolve, and in unwinding one cord, the other is wound up. To further the illusion, let two short ends of string be glued into the *inner* half of the balls, thus convincing the audience that the string was undoubtedly severed.



### The Box for Magical Apparitions and Restorations.

The description of this box, termed, in magician's language, casket, coffer, chest, etc., gives the key to an endless number of tricks, easily imagined and repeated with various changes. It is composed of three compartments in a row, the lid of each opening on a hinge; two

of them, on either side from the middle, are moveable, by means of a slide worked by a bolt at the bottom.

Supposing you have put a bird, or a mouse, into the last of the two moveable compartments to the right, for we

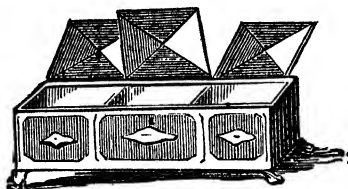


FIG. 79.

take the right hand as the starting-point; before you lift the lid of that division, make the slide carry that inner box to the middle, of course leaving the empty space visible. On coming to the centre lid, slide the former drawer back to its first position, when again nothing is seen. The third compartment is really only the space left free for the play of the two inner drawers. For the feat, you bring the bird back to the centre. Only one lid is raised at a time, of course. For the birth of flowers and fruit, and the production of birds, and the re-appearance generally of all kinds of articles made away with previously, this precious box is invaluable.

### The Box of Disappearances.

This box, only differing in size according to the object to be "vanished," coin, cards, flowers, bird, bouquet, rabbit, a horse if you like, etc., etc., contains a double drawer—in other words, one drawer inside the other.

We give a side view of the box, represented as if transparent; A is the box containing the drawer B, and the drawer C running inside of B. Drawer B has a front with a knob, by which both drawers can be drawn out or pushed in, but it has no back, and therefore, given an object laid in the inner drawer, on pushing both in, the object is taken upon the bottom of the secret drawer. At the back of the box underneath is a slit or finger-hole, where the least pressure will retain the

inner drawer, while the other is pushed in and out to show that it is empty.

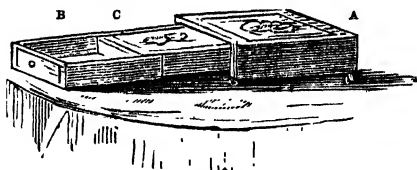


FIG. 80.

The article is laid in the inner drawer, when both are pulled out, and they are shut up naturally; but on the instant the outer drawer is re-opened, while the inner drawer is retained, the false drawer is shown, and the disappearance is performed.



### *A Specimen Trick.*

Having a pigeon or chicken hidden in the inner drawer, deliver a treatise, full of as *fowl* puns as you can *henvent*, upon egg-hatching by the Egg-gyptians, and so on, and having your box in this case manageable by being some ten inches long, and four or five square, hold it up in your left hand, and retaining the secret drawer, boldly pull out the other and reveal its plentiful stock of vacancy. Close it—seem to listen, and vow you heard chickens *clucking*. Then open both drawers, when the bird will fly out and let you know what's a *cluck*.



### The Avalanche of Ro-es.

Here we show a box, and not only do we display the drawer, but we pull it out so that you can actually see through the outer case, and, moreover, we take the drawer apart—as is easy from the fitting together being done by pins and mortices, instead of glue and nails or screws. There is absolutely nothing for the bird suspicion to build its nest upon? No! very well then, you can hold the box yourself and close it. Stay, do not shut it

entirely—leave it out an inch or two, in case we wish to slip anything into it.

I dare say you have all heard of the bloom of youth, the roses of life, and all that poetical strain. I assure

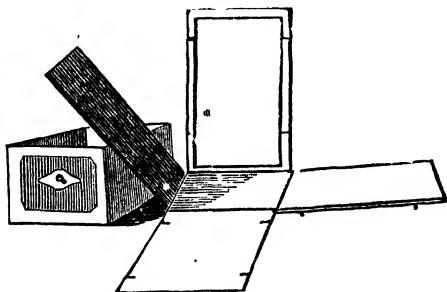


FIG. 81.

you, young ladies are human gardens, into whose composition enter the beautiful blossoms of life. And besides, by magic those unsubstantial but perceptible lilies of the forehead, carnations of the lips, and roses of the cheeks, can be exhibited in the body. Let that lady wave her hands over the casket, and “gently breathe the tender sigh!” Thanks! that’s about the *sighs* of it, as the unhappy field mouse remarked when the elephant’s foot came down upon him. Close the box; the miracle is effected. *Overpower Flowergorimos!* Draw forth the

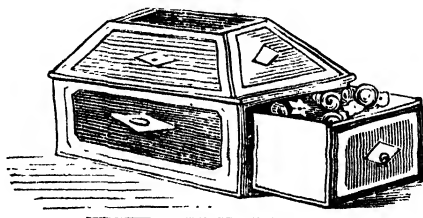


FIG. 82.

drawer! Behold! it is crammed full of roses of every species, as various as a Crystal Palace rosery.

*Explanation.*—Though the drawer and body of the

coffer are totally innocent of secret receptacles, the ornamental cover, it will be noticed, is rather high, and consequently gives a space ample for the concealment of the flowers, when tightly packed. When the drawer is closed completely, it displaces a spring, which releases the bottom of the secret receptacle above, and the drawer is filled as exhibited.



### The Coffers of Transformation.

You have a box with a partition in the centre and drawers opening one each way; one of them full of ribbons, or flowers, and the other having one or more birds. You ask a lady to put a ribbon or flower into the drawer of similar contents. When so done, you reverse the box while putting it on your table. Declare your intention of animating the ribbons, or enunciate your belief that flowers are only undeveloped birds, and that your magic box will perform the last stage of their transformation. Open the other drawer, and let out the birds. The drawers must fit close, and the knobs be an ornament to each side.

### To Make One of Three Objects Jump out of a Box.

You have a spring, an inch and a quarter wide by two and a half long, set at the bottom of an open box, and prevented from acting by the weight of a lump of sugar, laid on its upper part, in which there is a hole at the end. You show three knives, or spindles, or pencils, or such articles, of different colours, or otherwise readily known apart, and have one chosen. When you put all into the box, you set the point of the selected one into the little hole in the end of the spring. Dip your wand in some water, which you will say comes from an enchanted spring, and let a drop or two fall on the sugar. When it melts, which will be while you call out, "Spirit of sweetness and light, exert your powers!" the spring will be set free, and will shoot the knife out at your order.

A metal cup can be used for the same feat.

### The Magic Snuffbox.

Make a large enough slit in the side of a snuffbox for a shilling to enter and come out freely; over the opening put a flap of black paper, acting like a valve. Fill the box with scented snuff. Borrow a marked shilling. Spill some of the snuff on a white paper, so as to baffle suspicion. Have the coin dropped into the box, where it sounds. When slipped out by you, of course there is no sound in the box when you shake it. At last remove the shilling, and bring it to light elsewhere. From the snuff being in it, no one will suspect you have a hole in the box.



### To Read Three Numbers on Blocks Inside a Locked Box.

A, B, C, D (Fig. 84) is a walnut-wood box, eight inches long, two and a half wide, and an inch deep.

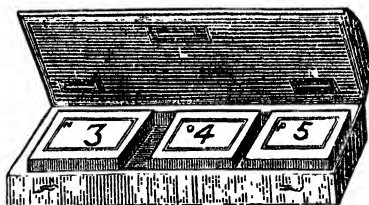


FIG. 83.

E, F, G is the lid. The interior is divided into three equal sections, by means of two cross-bars. It has a metal plate, like a lock, and two hooks, which help to keep it firmly shut. I, L, M (Fig. 83) are springs, an inch and a half long, very thin and flexible, set into mortice holes, two-fifths of an inch deep, in the lid, which is but three-fifths of an inch thick. N, O, P are three wooden blocks of the same size, on which are painted devices, letters, or, as here given, the figures 3, 4, and 5. Their thickness differs but scarcely perceptibly, on the closest examination.

The box is covered on the out-side with leather, or the

American leather-cloth, and is lined with baize, or soft fleecy cloth, to hide the three springs.

The two hinges, *e* and *f* (Fig. 84), are bent around the edges, so as to lap over the top. The piece of brass, *g*, is apparently the guard of the keyhole, and is likewise bent, to follow the line of the lid. A small piece

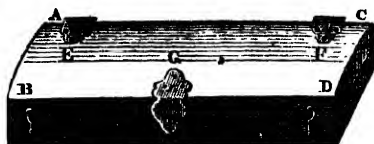


FIG. 84.

of brass wire, riveted to the end of each of the inside springs, passes through the bent part of each of the hinges and the lock-guard to the exterior, seeming to be merely one of the several brass nails fastening them. Yet these pegs can move, and set higher or lower, according to which of the three blocks is under each, so that the block *n* lifts less than *o*, and *o*, again, less than *p*. The elevations are barely perceptible, but the trained eye will distinguish them, and the finger should also know the variation by touch.

Therefore, in whatever order the three blocks are placed inside, that order can be told from without, by the mere examination of the little pegs.

*Performance.*—You give the box to one of the party, letting him freely arrange the three figured blocks, then close and fasten the box, and yet no sooner have you poised it in your hand, than you say what the combination of figures is. Or you can affect to use a magical spy-glass, and so take your ease at examining the pegs, and giving the proper answer.

If the person should turn the blocks upside down with the idea of perplexing you, or even take out one or more of the blocks, you can equally as well know how things stand, particularly if the pegs are so arranged that they will be flush with the metal of the hinges and plate when there is no block under them to lift them up.



### Jack in a Box.

In a box is put a doll whose body is a spiral spring, so that, though the body at full height is higher than the box, it will still be head erect when squeezed down and the lid shut.



FIG. 85.

The moment the lid is unfastened Jack leaps up into view.



### The Box of Substitution.

Fosco Brikell, the magician, was one week staying at Lord Tomnoddy's country villa, and after a preliminary display of his prowess, the household were in great trepidation, for the next revelation might be of cook's lard-cenies, butler's whining, and the groom's hostile oat-tacks on the horses' feed.

One of the servants came direct to the magician, and, after much hesitation, stated as follows how he was in trouble :—

“ If you please, sir, there's a deal of dishonesty in this 'ere 'ouse, sir ; everybody can't keep their fingers off their dear master's goods, and the cat is under a heavy series of charges of purr-loining. I have been often an'

often hurried to take something, but I never let my hands seize anything but once."

Here a flood of tears threatened to leave the apartment an inch deep in water.

"There was a hold-fashin' snuff-box one day on my lud's mankle shelf, if you please, sir, and in an unhappy moment I yielded to temptation, and took it—it was so much like a mull of my late lamented grandmother, sir!"

Sobs were in the ascendancy with Master Joe, before he could conclude.

"That werry day I was sent up north to our racing stables, an' when I got back I heerd, to my dismay, that my lud had missed the bacca-box, which it turns out to have been turned hout of the elm of the Royal Oak, an' werry much prized. I daren't confess my crime, nor put back the snuff-box. Oh, what'll I do, sir, what will I do?"

Monsieur Brikell was impressionable, and accepted the snuff-box, and the task of its restitution.

On that evening an entertainment of prestidigitatory science was given, and the finale of the fête was the exhibition of a round box on a pedestal, having the

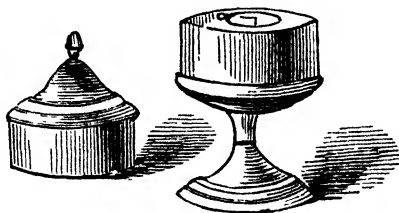


FIG. 86.

property of changing one thing for another, and even of replacing one article by a missing thing. Fosco opened his box, and begged her Grace of Servile Civis to put her watch within it. The box being closed upon the timepiece, Lord Tomnoddy was asked if he had ever lost anything of value. With more haste

than a gentleman of his indolent habits had been ever before known to manifest, my lord begged to be excused, for fear of really embarrassing the sleight-of-hand operator.

"Well, since, you will insist," he said finally, "I have lost a snuff-box, which I should be very glad to see again, 'pon my word." "Is this anything like it?" inquired the man of mystery, drawing out of the box, not the watch which had been put into it, but the snuff-box which Joseph, the sore-oppressed penitent, had given to him. My lord has never yet recovered from the shock. But there was another shock in store for still another individual.

Master Joseph, the repentant, during his interview with the prestidigitateur, had not failed to notice that the latter's goodly stock of cups, inlay-boxes, rings, watches, and other articles used in his feats, were of valuable materials, and packed, when not wanted, in a portable strong-box. It occurred to him that, as his peculations, not confined to the *snuffetière* (magician's French for a change), might at any day be discovered, he had better leave his situation at such a fortunate juncture, when the stranger within the gates could be despoiled.

Early in the morning the inhabitants of the villa were alarmed by a series of frightful screams, and, hastening, with the bravest at their head, in a more or less picturesque attire, consisting mainly of night-caps and candle-sticks, to the spot, there was found in the room next to Monsieur Brikell's bed-chamber, a man, his hands firmly set against a small chest, and his features and legs twitching in extreme but ludicrous pain. Do what he might, he could not release himself, and not until after he had poured out the whole story of his numerous acts of dishonesty, did the magician, with one word, and an unseen touching of a wire in the bedroom, allow the mysterious attraction to cease which had bound him to the strong-box. (*See the Secrets of Electricity, the Magic Cashbox.*)

As for the box of substitution, it is composed of three parts, namely, a round case or drum on a stand, in the bottom of which is a spiral spring to lift up to

the level of its upper edge, in the centre, any object placed on it, but it and the object (in this case the snuff-box) are kept down out of sight by a small rest on which is laid the object to be transformed (in this case the watch). The cover, when taken off out of the box, carries with it this rest and false bottom, when, of course, the spring lifts up the secreted article.



### The Enchanted Box.

We have here, very conveniently, a very pretty box, which has the advantage of possessing an excellent lock. Have the kindness to lend me a ring,—pray put it into the box yourself. Now lock it, and keep the key.

You will certainly comprehend that without magic it would be impossible for me to remove the little trinket you have shut in there before your very eyes. But *magic* makes everything easy; and we may venture even to increase the difficulty of the trick. Here is another box, also with a double lock. You shall yourself put the first box inside it, if you will be so kind, and secure it, also, by locking it. Very well, keep it under your own charge. I can remove the ring without stirring from where I am! Shake the box, to assure yourself that the ring is still in its place. You hear it rattle? Well, now I take my wand, and as the box is enchanted, which fact renders all your precautions useless, I order the ring to return to my possession.

Be good enough to open the boxes, since you have the keys. The little trinket which you have kept under a double lock has disappeared. We shall find it by-and-bye; but as you have probably not understood how this trick was accomplished, we will explain it to you before going any further.

*Explanation.*—In one lower corner of the box in which the ring was put will be found a small secret door which is carefully disguised, and can be readily shut or opened by the thumb.

It is by this that the conjuror (to whom a second suffices for this purpose) withdraws the trinket which has

been locked in the box, before it is placed in the other one. The noise heard by the spectators, which sounds like the rattling of the ring, is produced by a small

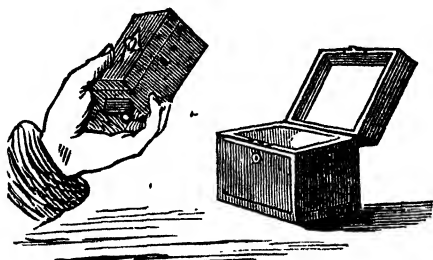


FIG. 87.

brass spring, which drops from the lid of the large box when it is lowered, and resumes its place when it is raised. This spring, striking an ornament on the top of the inner box, makes a sound perfectly resembling that of a ring shaking about, and insures the success of the trick.



### The Feathered Confectioner

Would you like to taste some confectionary? Creams? Take my feather. Do you like chocolate? Take my feather. It is like some of the patent medicines they advertise—good for anything, no matter what your complaint—or rather, since nothing but what is nice comes from it, no matter what your taste.

Now, the roll that I hold in my hand is a carefully closed case, in which I preserve this precious plume, although, as you may see, its dimensions are somewhat limited. I do not know that I shall ever have a better occasion for displaying its beauties than now, when I shall be doing honour to your presence; so I will take my magician from his prison. There! you see it is merely a handsome ostrich-plume, and the case is but just long enough to hold it. I even have

some difficulty in getting it in, and the lid crushes it a little. How awkward I am! I have let it fall—only on the carpet, luckily! Let us see, however, that it has sustained no injury in its case. No! It does not appear to have done so. Let us hasten to put on the lid, and put the feather away, for to-day. But do you not smell something like baked sugar? It seems to proceed from the case. Let us open it again quickly.

What do I see? Sweetmeats of all sorts, up to the very brim! Hold your hands. Here are plenty for every one, and some for all tastes. But the feather—what has become of it? It seems that it is a confectioner as well as a magician, and has gone to see after its ovens, whence it is sending us these delicious bon-bons, by way of a *sweet* farewell.

*Explanation.*—The case, which is in the shape of a roll of music, contains both the confectionary and the feather, at first, being divided, throughout its length, into two parts, each coming to a point at opposite ends. There is, of course, a lid at each end. From one end you draw the feather, which, from its form, is peculiarly well adapted

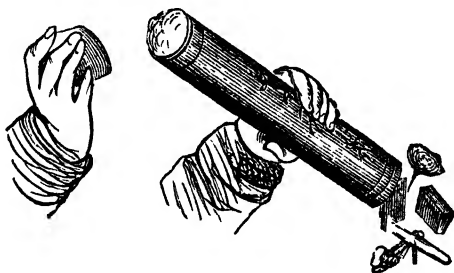


FIG. 88.

for going easily into this cone-like division. From the other end, you take out the bon-bons, &c. Your pretended awkwardness in letting the case fall enabled you to take it up again in the reverse position, and thus appear to take off the same lid as before, when, in fact, it was one at the other end.

To this Mr. Goody objects that you afterwards opened the case, and showed the thick end of the feather.

Yes! But only the end; and that of a false one, fastened into a false lid which you took off, when taking off the real lid of the bon-bon box.

### A Musician in a Half-crown.

"Mr. Goody! Will you kindly lend me a half-crown?"

"Here it is, sir. By the way, that reminds me that I have not yet told you the name of the friend who ——"

"Stop, sir, pray! what on earth have you got in your coin?"

"Just two-and-six, Mr. Conjuror."

"Something more, and more valuable than that! Some musical instrument, and a musician, too, if I may judge from the harmonious sounds that issue from it."

"I don't hear anything of it," observes our simple friend.

"Ah, your ear is not a conjuror's! However, if we force the tenant of this little silver palace to make his appearance, we shall understand the mystery better. As we have no other way of giving him notice to quit, we



FIG 89.

will make it a matter of necessity, by depriving him of air and light.

"To do so, we will shut up the coin in this box, just

large enough to get it in. Here! take the box, and do it yourself, Mr. Goody. You see that it is empty, and that the coin falls to the bottom. Let us shut up the box, to carry out our threat of excluding light and air. Now, be good enough to open it again, just to see if this eccentric lodger will take his departure. Whew! there he goes, in truth, changing his abode by flying off through the window. The musician and the instrument are one—the prettiest canary I ever saw!”

“But my half-crown?”

“No use to ask *me* for it! The box has not left your own hands since you yourself put it in.”

“But the box is empty, perfectly empty.”

“I don’t know anything about it. Would you recognize the coin again?”

“Certainly; I marked it.”

“Since you are a magician yourself, take my wand, and command it to find your coin. You hold the end of the wand ——”

“Yes, sir; and I order it ——”

“Your orders are fulfilled before they are uttered. Here is your half-crown, just come out of the other end of the wand.”

Mr. Goody looks round with an air of triumph. He begs permission, far-seeing mortal that he is, to examine the wand. You, perhaps, would prefer to examine the box. Willingly!

*Explanation.*—The box and cover are the same length, and in closing the box it slips into the case. They contain a third case, which is either raised with the cover, or remains in the interior of the box (which it really lines), just according to whether you do, or do not, press the edges or rims of the cover. It is in this latter compartment that a canary is placed when preparing for the trick. When putting the half-crown into the case, you lift up, by one movement, the lid and the compartment in which is the bird. The spectator, therefore, sees nothing but an empty box, under which you take care to keep your own hand, even when giving it to him to hold, for it has a moveable bottom, gummed in so slightly that the weight of the coin makes both fall into your hand. You close the box, and then desire



the person holding it to open it himself. As this is done in the ordinary way, the lid only is removed, and this leaves the part containing the bird fitting inside the box, and open. Of course the bird avails himself of the opportunity to fly away. Use a wild bird, stained yellow.

When it comes to finding the missing coin, you do as you would with anything else. Hold the wand with one hand, resting the other extremity on the hand containing the half-crown, which the owner usually receives back with as much surprise as pleasure.



*Droll Result of a Blunder.*

**The Handkerchief-restoring Globe.**

I have borrowed a fine handkerchief from a lady. Going to my table, I put a rose in it, fastening the four corners, so that the flower is completely wrapped round. I then give it to a spectator, who undertakes to keep it thus imprisoned.

I then offer to take it back, without taking it from the handkerchief, or allowing the person in charge to



FIG. 90.

let go his hold. A laugh informs me that my offer is accepted.

I then take a pair of scissors, and with a single stroke

cut the handkerchief *below* the wrist of the person holding it. I then show, triumphantly, that it is in my possession, and still in its cambric covering.

Alas! my triumph is short-lived; for the person who has assisted me gives me back the mutilated handkerchief, neither he nor I daring to return it in its present state, with a large hole in the middle, to the owner.

Happily I have in my possession a golden ball, one of the most skilful of repairers. However much torn or cut an article may enter it, by this hole that you see at the top of the globe, it comes out so well sewn and mended, that you cannot discover where the injury has been. It is almost equal, in fact, to a sewing machine. But there is something already in the ball. Ah! it is the remains of a bit of blue cashmere, which I was using yesterday to mend a magnificent Indian scarf; by some oversight, it has been left in it. Let us now put in the handkerchief and its fragment. The operation will not take more than half a second, and the mischief ought to be thoroughly repaired even by this time. Here is the handkerchief, you see. Well! what do you find to laugh at?



FIG. 91.

Oh! what a misfortune! Instead of the bit of cambric, I have put the piece of blue cashmere into the ball, and it has got sewn into the centre of the handkerchief!

A sad blunder! For the work has been done very firmly, and my machine, clever as it is, cannot undo its work. All I can do, therefore, madam, is to return you your handkerchief in its present state—at least, unless you will permit me to cut it up into little bits, small enough to sow in the earth in which is growing the orange tree which has just been brought to me. We shall then see what will become of it. You consent? With five or six strips with the scissors, we shall make the cambric fit to sow in our little garden.

Meantime, would you like to look into the golden globe? It would be superfluous to inform the reader that, before beginning to use it, the conjuror has exchanged the borrowed handkerchief for another. He has dropped the former on the trap in his table, whence his confederate has removed it, unobserved by any one. Now, then, for the ball, which is formed of two hemispheres, united by a horizontal circle, on which they turn easily, one to the right, the other to the left. In the interior is another movable ball, hollow, and divided into two compartments, with one opening for each, and held in the middle of the before-named circle by two screws, which are not tight, and which form the extremities of its diameter. Finally, one or the other opening of this interior ball corresponds with that of the large outer one, when you turn either the lower or the upper part.

You have seen the conjuror put the cut handkerchief (which, you will observe, is not the borrowed one) into a compartment of the small ball, and draw a second one, all prepared, from the other. Work out the puzzle by a similar apparatus, and the method will be clear.



*The Box of Hot Coffee.*

**Coffee of Haricot Beans.**

I have just had a present of a box which would be perfectly invaluable to any one who was very fond of coffee. There is not a coffee-pot, patent or not patent to your senses, which makes it better, more quickly, or more conveniently. To prove to you its good qualities,

I will beg some of my friends to accept a cup of excellent Mocha, which my box, empty at present, is about to furnish to us. I have also been presented with a packet of — Dear me! what stupidity! Instead of coffee-berries, the package contains fine haricot beans. Well, since they are here, and the coffee is not, we will make them serve."

"You must first transform them into footmen," exclaims a voice which we recognize, to our horror, as that of our old enemy, Mr. Goody.

"May I ask why?"

"Why! Because you offer us coffee, and tell us that the haricot beans are going to serve us!"

"To make coffee of, in *mocha ry* of Mocha. I am truly sorry, Mr. Goody, to have given you the trouble of interrupting the performance."

"Oh, you need not apologize, sir! And that reminds me that I have not yet told you the name of the friend whom I met while running round St. Paul's!"

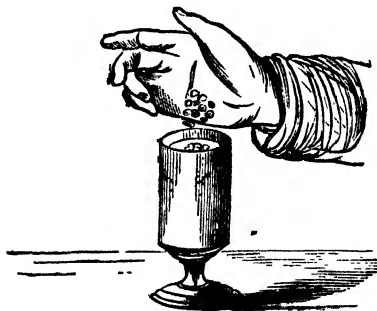


FIG. 92.

"You will, perhaps, oblige me by mentioning it at another time, for here is my coffee canister filled with haricots, and I cannot allow this curious box to remain any longer useless. The manner of employing it is very simple; it consists of putting the cover tight on, then touching it with my wand, and the coffee ought to be fit to pour out. Let us open this novel coffee-pot. Sure enough, the haricot beans have turned into excel-

lent coffee. Quick, bring the cups. The sugar is already put in!"

This mode of offering coffee to your guests is too original not to inspire you with a desire to possess a similar apparatus. It must be made of two parts, each like a large tube, or round case, of about the same length, the one having a top, the other a bottom, whilst to close it you slip one into the other. In the one

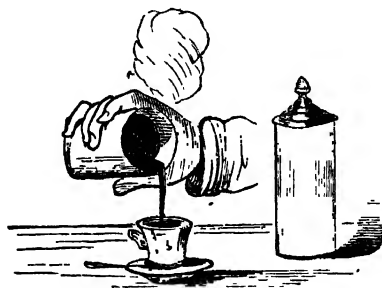


FIG. 93.

which serves for a cover is another smaller box, kept at the top by means of a catch, which, when you are about to perform the trick, is filled with boiling coffee, ready sweetened. The other part, the real box, shows at first nothing but an empty space throughout its entire length. But at the moment of putting in the haricots, you touch a spring in the bottom, which makes a false bottom rise up, so that while it appears to be filled to the brim with haricots, the lower part is really empty.

When you close it, the compartment containing the coffee presses back to the lower end the layer of haricots, and the false bottom resting on a spiral spring. Before opening the box again, you must turn another knob, with which the cover is provided, and which lets go the catch holding the compartment filled with coffee. This latter remains in the lower part of the box by its own weight.

*The Casket of Birds.***The Miraculous Post; or, Winged Expresses.**

Are you anxious to send a letter post-haste to the King of the Sandwich Islands? Take my little ebony box! Do you wish to invite the King of Dahomey, or one of his gold sticks, to dine with you? Use the box! Hardly will you have thrown in your letter, than you will see it flown away with by the lightest and most rapid of expresses.

Do me the pleasure, madam, to test the powers of my little letter-box. If you have no message to send, at least confide to it a visiting card, which you may forward, if you like, to the Empress of all the Russias.

Hold the box yourself, I beg of you. See, it is open and empty! Put your card in—you need not address it. My messengers cannot, indeed, read; but they will guess your wishes. That will do! Keep the box, if



FIG. 94.

you please. Shut it! Now lift the lid! There are my messengers springing from it, and setting off on their journey. They are, indeed, beautiful birds. Examine the box! Your card is no longer there. It has been carried off by one of those winged couriers, invisible to you but a moment before, but whose prison door you have opened.

*Explanation.*—The interior of the Magic Casket is plain black, and the eye does not perceive any irregu-

larity in it, but the apparent bottom, on which you place your letter or card, is only a false one, resting on a spring, with space sufficient between to hold two or three live birds. Shutting down the cover, puts in play a spring which makes the false bottom turn on its hinges upward, and rest closely against one of the sides; it conceals between the two (as if in a portfolio) the card or letter, at the same time giving liberty to the birds, who fly off the moment the box is opened, leaving the spectator stupefied at the apparition, none the less because he has never, for a moment, let go of the box.



*A Proof that it is easier to make pure Wine than to drink it.*

### **The Magic Drinking-Glass.**

Every one knows that really pure wine is a beverage so rare and precious that it deserves more honour than that of being drunk out of an ordinary drinking-glass. Here is one of silver, of an elegant shape! And since, thanks to our conjuring science, we have the happiness of possessing some pure wine, unadulterated with water or other mixtures, we will drink it out of this handsome cup, into which I will pour it with all the honour due to so excellent a tonic.

Hand the cup on a tray to that gentleman there, who is, I dare say, a connoisseur. Offer it to any one who wishes to taste unmistakably pure wine. How's this—you bring me the glass back as full as when you took it! Nobody has been able, you tell me, to get his lips near the precious liquor. Truly, this is a strange kind of glass, with this open-work border all round it, half-an-inch in depth. It is elegant, certainly, but somewhat inconvenient to drink out of, for the liquid is spilled before it can reach the mouth. Perhaps, also, you have not tried to drink without lifting the glass from the table. You think that it is absolutely impossible to do so! On the contrary, I am about to have the pleasure of proving to you that it is perfectly easy. I begin. You see, I have drunk it to the last drop without spilling any, and the glass is now empty. Do not forget the lesson.

It will be of little service, however, to any one who does not happen to be aware that the vessel has a double bottom, into which the wine descends slowly, while the magician sucks it up, gradually, by one of the four tubes (see Fig. 95) parallel with the sides of the glass, and

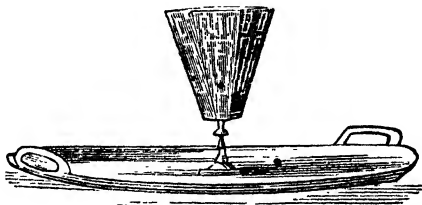


FIG. 95.

with the lower ends resting in this double bottom. He may thus not only empty the glass, but drink a dozen bottles of wine out of it without incurring the reproach of imbibing to excess.



In which we show that a Watch is made to be Ground in a Mortar.

"Ha, ha! Here is Mr. Goody returning to us, after a rather long stay away."

"Yes! I thought I might be useful to you in executing your little trickeries. I have a genius for such things."

"And you are admirably situated for displaying it."

"But I've come to show you an extraordinary feat!"

"What is it, sir?"

"I told you I ran round St. Paul's in five minutes. The time was kept by one of my friends, by the name of ——."

"Mr. Goody, will you lend me your watch?"

"With pleasure! But I am aware, beforehand, that you are going to put it into a blue velvet case, lined with silk; and then ——"

"So far from it, I am about to put it into this mortar."

"But——"



"Put it in yourself, I entreat. That will do!"

"Pardon me; but now I think of it——"

"To cut short your tardy reflections, let me beg of you to examine this pestle, and tell me whether it is not very solid."

"Very solid and heavy."

"Then you will kindly return it to me? Thanks."

"Hallo! What are you about there with my watch?"

"What you see. I am going to pound it in a mortar."

"Pound my watch in a mortar! Stop, for heaven's sake! If you go on, at that rate, it will be ground to powder in no time."

"Well, then, we will make you a new one out of the dust. I do not wish to deceive you. These are the remnants of your watch that I am emptying out of the mortar."

"Sir! It is abominable! Watches are not made for pounding in mortars."

"On the contrary, you see that they are!"

"I desire you to return me, instantly, the watch I have been foolish enough to entrust to you."

"Do you want it returned in its present state? Allow me to gather up the fragments, and first give me time

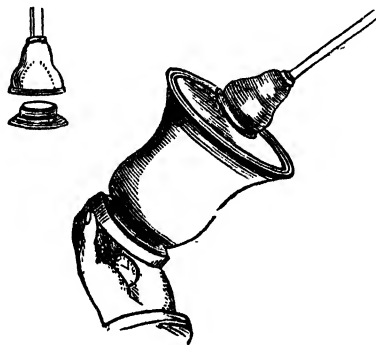


FIG. 96.

to think how I can turn this powder into the new watch I have promised you."

*Explanation.*—The bottom of the wooden mortar is movable, by means of a small hinge. It was easy, therefore, by means of this, to drop the watch into one hand, and lay it on the trap of our magician's table, from which place our confederate had removed it before we began to use the pestle.

And even the pestle is not the heavy implement we invited our friend to examine. We changed it for one similar in appearance, but with a hollow at the large end forming a box, with a lid screwed on at the bottom. This box contains fragments of a watch, which fall into the mortar, after unscrewing the cover, while pretending to pound; the bottom of the mortar being small enough to hold the cover, when you press on the pestle. This may be done without an apparent effort, and it stays firmly fastened there.

### Rice, Coffee, and Dried Pease.

"A little more patience, Mr. Goody! Your watch is more than half completed already. Allow me to show the party these three boxes just brought to me.

"Oh! one is filled with coffee, this with rice, that with dried pease. We will put the coffee on our left, the pease in the middle, and the rice on the right. I will stick a long darning needle in each of these boxes. See, it goes in to the very eye. You can be sure, therefore, that they are full of what you see in them. We will put on the covers, and by the power of our magic wand order the coffee to pass to the right, and change places with the rice, which must come to the left. Let us see if we have been obeyed! Perfectly. The rice and the coffee are now on opposite sides. We will cover them again, and order them to resume their first places. Pass! There they are!"

"Mr. Conjuror! I have just been asked the time, and as I was foolish enough to lend you——"

"You are very noisy."

"I can call my *crow-no-meter* of my anxiety."

"Oh! you are still thinking of your watch! Well, sir! to put an end to this mutual annoyance, let me

ask if you will consent to accept, in its stead, the contents of this little box in the centre?"

"The one filled with dried pease?"

"I offer it to you without examining it."

"But as I know the contents already, being *on the watch*, I must decline to make peace on those terms."

"I regret it, for I see no other means of fulfilling my engagement with you; for the fact is, your watch has taken the place of the pease that were in this box, which you have only to open, to see your watch, looking

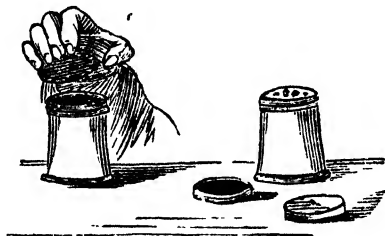


FIG. 97.

as bright as if it had but just left the hands of the maker.

*Explanation.*—The three boxes are five or six times as high as they are wide, and are closed with lids, which cover over nearly a quarter of the depth of the boxes. The boxes are made in two compartments. The upper one is no deeper than requisite to hold a tolerably thick layer of coffee-berries, rice, etc. The bottom of this division is of wire-work, through which a needle, indeed, may pass, but not the grains. Underneath this is the body, or second division of the box, in which you put the same kind of grain as was in the opposite box. Thus, what has rice at the top, has coffee in the lower division, and vice versâ. As it requires only a simple pressure with the fingers to lift the upper division of the box with its cover, you can show the same box filled alternately with rice and coffee, or pease, at your pleasure.

### Dice which will Pass Anywhere.

Look at this die. You see it is eight or ten times larger than the ordinary size; yet I will make it pass, at your wish, through the table, or into your hat. All I have to do is to cover it with the dice-box. You smile.

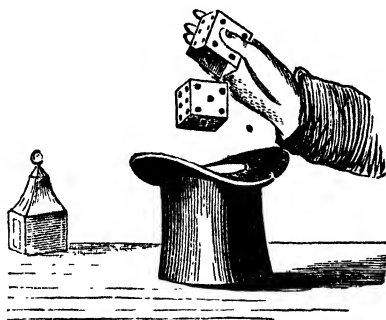


FIG. 98.

I perceive that my explanations have made you half a magician yourself, and that it is no longer easy to deceive you.

The principle is akin to that in the counters and their cover trick. You have a die three inches square, and a hollow tin die exactly like it, less one side. A spot or scratch may appear on both, as done by accident. Also a tin cover, which the dice fit into.

A variation is as follows:—Borrowing two hats, you slip into one of them the mock die, while you send the real die and cover around for examination. When in your hands again, put the hats one upon the other, brim to brim, the mock die in the under one.

Say, “You see me cover the die upon this hat (the upper one), but on knocking the cover with my wand, I have but to take it up to show the die gone, and, what is more wonderful, in the hat (take it off), as you see. (Put the real die into the hat.) Really, you look very incredulous, but I shall convince you presently.”

Now take out the mock die, and putting the top hat on again, brim down, set the die upon it and the cover

on it. Tap it with your wand, and lift up cover and false die together. You can stick your wand up into them, and noisily work it round these. Push away the top hat and turn over the other, when it spills the real die out of it.

*Magic Gambling.*

**The Die Changing into an Orange.**

Ladies and gentlemen, I beg to present a proof that with some persons it is downright madness to throw dice. Here's a box, from which I draw this die, of an enlarged size, for your better view. The box is now empty, as I discover to you. In the box I put an orange—see, it fills it up to the edge, and I lower the lid on it, and cover the die with the little Chinese pagoda.

I will keep the bank, as the saying is, and agree to lose whenever you truly tell me where the orange or the die, which you please, is found. You suggest, that as

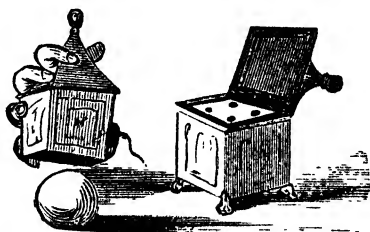


FIG. 99.

you saw me put the orange in the box, it must be there. Let's see. Oh, no; it's the die there now. It's the orange under John Chinaman's miniature temple. Shall I repeat the feat? Why, they are back as before! You see how sure I am of winning.

*Explanation.*—Inside the square box, and fitting it, is a cube of tin, painted like a die, less one side—the top—so that the orange can be dropped into it as if only

into the box. To make the orange vanish, there is a false lining to the lid, held by a catch, released by the knob of the box cover, which lining, when down over the orange, closes the mock die, and forms a box around the fruit, inside the casket itself. For it to reappear, you turn the knob the reverse way, when the catch seizes the die top face, and lifts it up as before.

The die under the cup is a one-sided hollow cube, the open face always being set on the table, on the trap, which works the moment you put it down, and pushes up an orange into the hollow die.

If you wish to show the orange there, squeeze the case, and the die goes up with it. If not, leave the die on the orange.



### Instantaneous Bloom of Flowers by Means of Electrified Seeds.

I place before you a handsome vase, and you see, by my taking up a pinch or two, that it is full of mould. Many learned men have asserted, that grain electrified will produce more plants, and of a finer and larger growth, than when only natural.

I have here some seeds of that sort; you may examine a few at pleasure—the rest I sow in the furrows I have



FIG. 100.

traced with my invaluable wand. As Sir *Voltaire* Scott—upon my word, so I heard a Frenchman designate

him—would say, in my *wanda*—I beg pardon, *Wamba*—*I've-an-hoe*. See, they have disappeared under the earth.

The ladies will please name their favourite flowers—rose, lily, jasmine, nignonette, and dahlia. I put the cover on, so as to shelter the germinating seeds from the unelectrified atmosphere, and also to protect the seedlings, for I can hear them shoot. (You bend over the vase.) I hasten to remove the cover, and reveal all the flowers that were called for, and many more besides. *Few Shahs* of *Per-shah* have such *fuchsias* in their gardens! The *barren* ground, while in darkness—I may say *be-knighted*—has become a bouquet!

Ah! what do I see sparkling in this rose? No less than the diamond ring that lady was kind enough to trust me with a moment or two ago. I must have sown it with the seed, without having notice-*seed* it in my abstraction. To prevent another mishap, I beg to return it to you as it reposes on its sybarite couch of roses.

*Explanation.*—Electricity had little to do with the seed, as you divine. You will notice that, in lifting off the cover of the vase, I have at the same time taken up a plate covered with a layer of mould—the earth which I sowed, of course—which exactly fits the vase at the top. The bouquet was on an inner platter, bristling with tubes, in which are stuck the flowers which I pretended to select, but really had only repeated those names called out which were in the list I had previously prepared. This second plate is mounted on a spiral spring, which sends it upward the moment the flowers are in time to bloom.

•                   The Wonderful Egg-Cup;  
*Or, How an Unknown Card makes its Appearance in an Egg.*

One of the audience having selected a card from a pack, he himself, without letting the performer see it, shuts it up in the drawer of a chest. A fresh egg is brought, and set in an egg-cup. The magician waves

his wand towards it, and orders the unknown card to appear in the egg; when, the egg being broken, it is



• FIG. 101.

indubitably found to contain the travelling card. The box has but to be broken for it to be found empty.

*Explanation.*—The assistant has carried out of the room the pack, less the one card. At a glance, he tells which one was removed, and taking the like from a similar pack, he has rolled it up like a pipe-spill, lengthwise, and put it down a tube within the long leg of the egg-cup, forcing down a spiral spring within it. The performer, having calculated the time this will take, has had the selected card put in his disappearing box (already described), and examining the egg, has let the bystanders see that it is genuine by cracking one end. The egg-cup is brought in at this nick of time—the egg is put in it, the broken end downwards, and a touch to a button at the foot of the stand releases the spiral spring which drives the card upwards, and it finding an opening in the egg, is buried in it. And there the secret lies in an egg-shell.

### To Change a Glassful of Wine into a Shower of Rose-Leaves.

This very simple feat is one which never fails to be effective and pleasing.

A servant enters with a tray, on which are several



glasses, into which he very plainly pours some wine from a bottle: Of this, you say, you desire your friends to taste. When all the glasses are given out, and you have taken one yourself, you draw the attention of all by a sudden movement or an exclamation, and appearing to have gone crazy, throw the contents of one of the glasses towards the audience.

The ladies utter a cry of alarm, in fear for their dresses; the gentlemen are inclined to get angry on the same account. But the general anger soon gives way to a burst of universal laughter when the audience perceive a shower of roses falling on them, instead of the wine-drops. (Fig. 102.)



FIG. 102.

*Explanation.*—There was upon the tray a glass with double sides, between which a little wine was introduced by a small hole, which was afterwards stopped up. The interior of the glass (which appeared full of wine like the others) held the rose-leaves, which formed the perfumed cloud with which you have delighted the company.

*A Secret for amusing a Party with a Paper Horn.*

### The Cone, or Skittle.

“With a paper horn! Ah, yes, I know!” exclaims Mr. Goody, unhappily, with his usual assurance. “How many have I cozened with that trick!”

“Permit me to observe, sir, that the word cozened is

not parliamentary. It is not to cozen, but to *amuse* people, that we perform tricks in innocent magic."

"Well, but I caught them without amusing them, and made a capital pie of them, too!"

"Oh! what are you talking about?"

"Why, of rooks that I caught with a paper horn, smeared with glue."

Here, fortunately for us, the bore is called out of the room.

During his absence (which we pray may be long), let us see what we can do to amuse a company, which is not one of *rooks*, with merely a paper horn. You bring out of your pocket a small cone, about the height of your middle finger, and an inch and a half round the base. When you have tried your paper horn over it, and assured yourself that it covers it entirely, you are in a position to make it pass through the table, up and down, as often as it may continue to amuse the audience

*Explanation.*—The cone is composed of two parts, a block and a case which completely fits it, so as to cover it entirely when put on, and also exactly resembles it.

After having placed the horn over the cone, as if to try whether it fits it, you raise it again, holding your

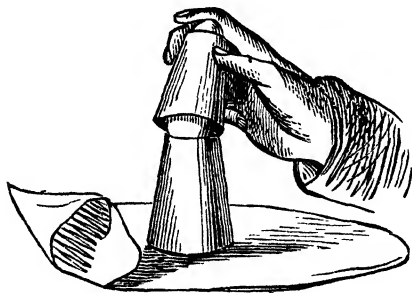


FIG. 103.

fingers rather tightly on the paper, which enables you to lift the cone with it.

You then take up the cone, and put it under the table, saying you are going to make it pass through it.

Keep it on your knee, or leave it on the chair; then, when you desire to show that the trick is done, you lift your horn by the point, and the case, or cover of the cone, remaining on the table, produces a complete illusion.

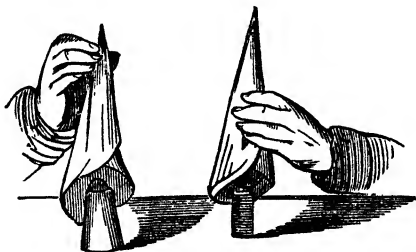
You then cover it over again, and pretending to make it pass through the table in the opposite direction, show the cone beneath the table, lifting up the horn again afterwards, so as to take up with it the case.



### **Pile or Cone: A more Amusing Game than Heads or Tails.**

The game of Heads or Tails is not a drawing-room amusement, so we give one which may with great benefit take its place. You have the little cone and a paper horn already made.

Make a pile of sixpences, about two thirds of the height of the cone. Begin by putting the horn over this latter, under the pretence of seeing whether it covers it entirely, but, in reality, to take off the case. Now hold the block in one hand, pass it under the table, cover the coins with the horn, and boldly wager that, according to the call for pile or cone, uttered by the



**FIG. 104.**

spectators, the one will take the place of the other, until they are tired of invariably losing. (See Fig. 104.)

If they call for cone, raise the horn by the point, leaving the case over the coins ; if for pile, lift the cover up with the horn, leaving the money visible. Thus, whichever it is, winning is certain.

### The Magic Salver.

Here is an apparatus, which, while furnishing you with the means of performing the following amusing trick, will be very useful to you in performing many others of a different nature. It is a salver, in the centre of which there is a concealed circular cavity of the size of a crown or half-crown. You let a person place upon the salver a marked piece of money, a ring, or any other article that you intend to get into your possession, without the knowledge of any of your audience. The article in question is really placed upon a sliding bottom. When you press this aside, the piece of money or the ring disappears, and, in its stead, some other object, previously

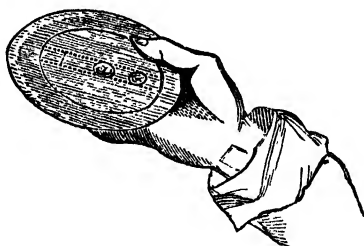


FIG. 105.

placed in the cavity, comes to view. All this is done with such rapidity that no one perceives it. To effect this, you have only to push aside a catch (which can easily be reached with the finger), at the bottom of the salver, and by the opening left at the extremity of the interior passage, by slightly inclining the salver, the article falls into the hand. (See Fig. 105.)

**Two and Two make Eight; or, The Multiplying Salver.**

From the time when the multiplication table was first explained, all have come to believe that two and two make four. Nothing is more untrue—at least in magic. We will proceed to demonstrate this, not by rows of figures, which would weary you and us also, but simply by facts, clear as the light of day.

Have the kindness to lend me four half-crowns, two at first. Place them, if you please, upon this salver, so that every body may see that I employ just the number of pieces I have mentioned. Very well; I pour, as plainly as possible, the two pieces into this little bag, which you can examine. You see it contains nothing. Now be so good as to place the other two pieces upon the salver. Very well; I pour these, like the other two, into the bag. And now, how many half-crowns do you think this bag contains? Four, you say. I warned you that if you calculated after the old system of multiplication, you would be led into error. Empty the bag yourself; you see it contains eight pieces. Do you still think that two and two make four?

*Explanation.*—You may continue in your calculations to multiply in the common way, for if the feat which we have just performed has shaken your confidence in the



FIG. 106.

multiplication table, examine our oblong salver more closely. (See Fig. 106.) You will find that it has a

double bottom, scarcely perceptible, it is true, but quite wide enough and long enough to contain four half-crowns. This false bottom is open at one end. In raising the salver by the opposite end, I have let the other four pieces drop into the bag, together with the four pieces you were so kind as to lend me.



### To Produce Cannon-balls out of a Hat.

You have promised an evening's entertainment of magic, and your guests are numerous. You borrow the hat of the most incredulous person, for the purpose, we suppose you to say, of ramming your wand through the crown, and yet not leave a hole in it. You naturally go to get the hat, and pass behind your table. You hold the hat (with both hands for an instant, if you cannot do otherwise) so that its rim shall be level with the top of the table, but a little behind it. On the inner shelf is ready a hollow globe of tin or other thin metal, like a small cannon-ball, and filled with little bouquets (or anything else you choose), and with a hole in it. While saying a few words on the subject of the trick which

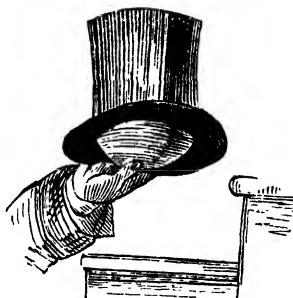


FIG. 107.

was the pretext for the loan, you pass one finger into the hole in the ball, and slip it into the hat; then, at the moment when you pretend you are desirous of transfixing it with your wand, you are amazed to find an unexpected resistance, and examine the hat to ascertain the cause. You observe that it would really

be a pity to destroy the horticultural exhibition which the owner of the hat seems to be in the habit of carrying on his head; and you take out, and distribute, one by one, the bouquets which you withdraw from the ball.

When they are all removed, and the spectators are at last convinced that now, at least, the hat is empty, you take out, amidst the general astonishment, the cannon-ball, which your servant carries away as if it were very heavy, the more effectually to deceive the company.

You return to your table, observing that now, at least, you hope to be able to execute the trick of which you spoke at the beginning. You slip in, in the same manner as before, a solid wooden ball, which, this time, you allow to fall with a great noise, which will remove all suspicion of the hollowness of your first projectile.

You have now, probably, amused and interested the spectators sufficiently to be permitted to return the hat without executing your first intentions, observing, when restoring it to its owner, that you did not calculate on his giving you a flower-garden and an arsenal.

A chair put close up against the inner side of the table will serve as a shelf, in the absence of a regular one. Dolls, drums, tin cups which fit inside one another, or similar articles, can be likewise produced.

### A Trick intended for the Service of Wards Oppressed by Cruel Guardians.

Italy, the birthplace of so many illustrious men, is also, like Spain, the land of Bartholos, Rosinas, and Almagivas. Some months ago, that comedy which Beaumarchais arranged, indeed, *for the stage*, but so often played by amateurs in private life, in which the principal characters are those of a tyrannical and odious guardian, a cunning ward oppressed by him, and a daring young lover, was performed at Florence, the parties being Il Signor Foxino, the lovely Lambinia, and the handsome Marquis Turtello Doveo.

Unscrupulous as to the means he employed, provided that they answered his purpose, Foxino, the hateful guardian, had—thanks to an ingenious but shameful

calumny against his ward—succeeded in inducing the Marquis to think no more of Lambinia. As this nobleman's love was the only thing which could protect Lambinia from the designs of the tyrant, and give the girl strength to resist the cruel assiduities of which she was the object, the guardian soon found himself on the eve of obtaining her hand, and, with it, the possessions of which he was, up to that time, but the steward.

While suffering from constraint, and unable to escape, the poor young lady suspected Foxino of having had recourse to some perfidious stratagem to cause an estrangement on the part of Dovao, who had excited in her deep affection. Feeling that her painful position was a sufficient excuse for the act, she managed to write a few lines for the young Marquis, but had almost abandoned the hope of finding means of sending them to him.

The day of the solemn betrothal arrived. Foxino, still fearing some desperate act of resistance from his ward, resolved to give a party, for the purpose of amusing and dazzling her. In his prudence, he invited only a few old maids and aged friends of his own sex.

The celebrated Mr. Cleverman, an English conjuror, happening to be at that time in Florence, had become acquainted with Foxino, through money matters, and he had been invited to give a sleight-of-hand entertainment, as a part of the amusement he was preparing for his festival to Lambinia. Mr. Cleverman agreed to do so, and sent his apparatus to the house of the old guardian.

On the day of the betrothal, the conjuring was performed, as intended. After several other tricks, the Englishman announced that his science enabled him to restore to its perfect state a sheet of paper which had been burnt to ashes; and that nobody might think there was any deception, he handed a pencil and a blank sheet of writing paper to Foxino, begging him to write something, and then fold it twice. This was the paper that was to be burnt and restored, and it was thus made impossible to substitute any other in its place. While Foxino was carefully folding it, after signing his name at the bottom, Mr. Cleverman observed that, not wishing to be suspected of the slightest trickery, he would



not even touch it with the tips of his fingers, nor should the company lose sight of it for a single moment, until it was actually reduced to ashes. He then took a long-handled ladle in which to receive it.

But just as Foxino was about to place his paper in this receptacle, Lambinia hastily threw another, saying, "Let me beg of you, sir, to perform the trick for me. with this sheet of paper."

The girl's expression was so sorrowful, and so imploring, that Mr. Cleverman<sup>e</sup> received it in his instrument; notwithstanding the exclamations of the old guardian, who called out to him, "Give me that writing, sir, give it to me, I command you! This is my house, I am in the midst of friends; and if I have to tear it from you by violence, I will do so, rather than leave it with you!"

"Calm yourself, my dear sir," replied Mr. Cleverman, very quietly; "thanks to my magical skill, I can gratify both you and your charming ward. See, I place on this tray the paper she has entrusted to me, and as I would not, on any account, retain it in defiance of your wishes, I put this match to it, and burn it."

"Pass me the tray, at all events," vociferated Foxino, "that I may at least assure myself that the note of my impertinent ward is really burnt."

Mr. Cleverman carried the tray to the old Italian, who found nothing on it but some smoking ashes; and as it appeared to him impossible that the paper from which he had not, for a single instant, removed his Argus eyes, should be recomposed of such materials, the tyrant uttered a sigh of satisfaction.

Now, the paper placed by Lambinia in the ladle was her letter to her cousin. Two hours later, this epistle, which the company had seen consumed by the flames, arrived, safe and whole, into the hands of the Marquis Doveo, who is now the happy husband of Lambinia.

To enable you to perform a like charitable action for some oppressed damsel, or perhaps simply to amuse your friends by restoring a paper from its ashes, we need only describe to you the ladle-like instrument employed by Mr. Cleverman.

We have already said that it has a handle, about a yard long, terminated by a wooden box, in the form of a

half-opened book. Placed as a leaf of a book would be, is a very thin slide, or shutter, which is movable, and lies close to one of the two sides of the case, concealing between it and that side a piece of paper, which is

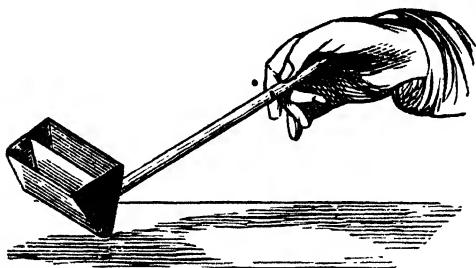


FIG. 108.

previously placed there. When the sheet of paper, on which one of the audience has written, is placed in the receptacle, a *spring*, moved by the pressure of the hand on a knob at the top of the handle, makes the slide pass from one side to the other, so as to conceal the paper put in by the audience, leaving the other exposed to view. It is, of course, this one which you place on the tray and burn. The written sheet is removed, with the apparatus, by your confederate, and disposed of according to your instructions.

—□—

### Seine-Fishing on a Card-Table.

"Mr. Goody, have you ever tried to fish on a card-table?"

Our friend glances all round, to see that there is no magic apparatus at hand, and then says, with a slightly sarcastic tone, "My dear sir, you may see me *fish*, as you call it, with some success, on marble tables, any evening you will do me the favour to dine with me at Gunter's; I generally finish with a game at dominoes. That is my fashion of fishing."

"I don't speak of that way; and although you appear, my dear friend, to have a little spite against conjuring —"

"Do you mean to say I am sulking, sir?"

"Don't lose your temper, I beg of you; it would be such a prize to the finder! I am speaking of catching fish. Here is a shawl which will serve me for a seine. Let us go near the table. You see that there is nothing peculiar about it. I throw my net. Our fishing will be successful; for I no sooner draw up my net, than I catch a globe, filled with water, clear as crystal, and with plenty of fish swimming in it!"



FIG. 109.

This trick, perhaps, appears as if it belonged to the order of turning and speaking tables, or something else equally inexplicable. It is not so, however. The part taken by the table is wholly passive. Water, globe, and fish are all concealed under the skirt of the conjuror's coat, when he announces that he is about to fish on the table. You will soon see how easy it is to perform this trick. The globe used is wider than it is high, in the shape of a broad bowl, and is hermetically closed by a piece of India-rubber cloth, somewhat smaller than the top, very flexible, and with a hem at the edge, in which is a string to draw it. The water and fish being put in, the India-rubber cover is stretched over the top, and secured by the string; the globe may then be slipped into a waterproof oil-silk pocket, fastened by a band round the waist. This leaves the operator perfectly free in all his movements. You now comprehend how the shawl serves as a fishing-net.

**A Vessel that will let out Water at the Bottom, as soon as the Mouth is Uncorked.**

Take a tin vessel, perforated at the bottom with several small needle-holes. Plunge it into water with its mouth open, and when full, *while in the water*, stop it very tightly. Whoever uncorks it will be surprised, as the water will spirt out of the small holes on the admittance of air from above.



**Gold-fish in a Vessel of Ink.**

Do not believe, I beg, that this is a deceptive fish. All my conjuring can do is to prove that ink, like the water of rivers, lakes, and oceans, is peopled with fish; perhaps even more densely, since we will show that at least one fine fish will be found in this small glass of ink. Black ink being the least transparent of liquids, you cannot, indeed, *see* the fish; nevertheless, there it is. Now, I will dip this card into the ink, and you will perceive only half the figure, as the rest is immersed. Again, I will pour a ladleful of the ink on this plate, out of the vase, and you no longer can see the figures on the bottom of the plate. If we could succeed in making the ink transparent, indeed, you could discern what it has now concealed; and, of course, you would also be able to see the fish we have spoken of, sporting in the liquid.

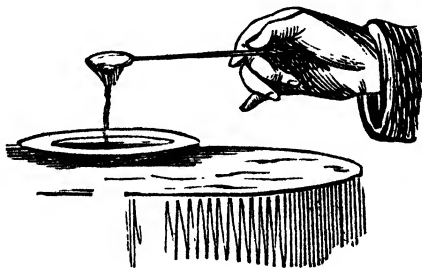


FIG. 110.

Nothing, however, but the magic handkerchief can make ink pure as crystal. To perform this prodigy, I

will pass it over the vase. You see! The transformation is complete. It contains nothing now but transparent spring water, and a beautiful gold-fish is disporting in it

*Explanation.*—The glass goblet has a lining of thin black india-rubber, or black silk, which sticks to the inside, when wet, smoothly and closely, so that the water within is not seen. The ladle has a hollow handle full of ink, which runs into the bowl through a small hole, when held bowl downwards. The card to test the ink is double, the same figures on both sides, and one half blackened beforehand. In removing the handkerchief or cloth, take out and carry away the secret



FIG. 111.

lining, and so discover the gold-fish in the globe or glass.

—[ ]—

### An Omelette in a Hat.

The moment I utter these words, I am interrupted by Mr. Goody, who rises and calls out (gesticulating like a madman):

“An omelette in a hat! That’s the trick, that’s my great triumph: it is always *my* hat which is used to make the experiment. You will observe that it is empty (‘Even when your head is in it!’ exclaims a witty bystander), and that it is just like all other hats. Well! you shall see what—you will see.”

Mr. Goody having a bran new hat, which he offers me

with great eagerness, I cannot refuse to avail myself of his kindness. Our bore, therefore, resumes, almost without stopping to take breath :

"The conjurer will now break the eggs, and put them, with flour and water, into that little china bowl ; then he will pour the whole before your eyes into the hat—*my* hat ; shake it two or three times, and draw out a smoking omelette, or a hot cake, yellow as gold."

Despairing of making Mr Goody hold his tongue, we try to get a little peace, by doing precisely what he has described ; and when he sees me, at last, take an omelette from *his* hat, the good gentleman sets himself down for one of the greatest magicians in the universe, and shakes hands with every one right and left, until his neighbours decide that he is the perfect spoil-sport we always thought him.

As it would, probably, be infinitely more agreeable to our readers to have omelettes made in the hats of other people, than to see it done in their own, we hasten to teach them the mode.

Have an omelette cooked without butter, or a pancake in a tin dish, which is placed beforehand on the trap of the table, behind which you must pass to make the experiment. When you get to your place, manage to let the dish and its contents fall, without being observed,



FIG. 112.

into the hat. It is this dish which receives the eggs, water, flour, and other ingredients poured out of the china bowl. The tin dish, fitting exactly inside the

china bowl, the magician, while pretending to empty it entirely of its contents, takes the opportunity of slipping both out of the way, so that the omelette or pancake alone is left in the hat. By wrapping the omelette in fine paper, no damage is done *the hat*. The fire it is cooked by is of spirits of wine, plenty of flame—not heat.

*Another Method of Performing the Last Trick.*

**To Cook an Omelette over a Lighted Candle.**

Break half a dozen eggs into a hat, place the hat for a short time over the flame of a candle, and shortly after produce, well cooked, smoking hot omelettes.

As before, the omelette is previously made, and the eggs are empty shells. One egg, however, is real, and broken as by mischance under the eyes of the audience. Prevent the latter from seeing into the hat, by placing it high above the table. If you have smoked the hat, borrow it back for another trick; but you will return it, after it has been brushed, some time afterwards, with an excuse of want of time.

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## PART IV.

### THE SECRETS OF GRAND MAGIC.

#### The Magician's Table.

**E**XCEPT to the initiated, white or innocent magic, as distinguished from the rude atrocities known of old as the black art, is a supernatural thing.

As the antique divinities required their own particular temples for the display of their mighty mysteries, so we must be in our own house, to make our power appear in full lustre; and theatrical scenery and adjuncts alone properly give entire effect to its dazzling prodigies.

Nevertheless, that which amazes and delights the numerous audience, may be a familiar spirit in a country house or town parlour.

But if you want to enliven your guests with the most varied marvels, you will have to set apart some room for your performances, or, at least, have the room you select prepared for the working of the trap-doors and wires, which form the better portion of your wizard's "plant."

We have alluded on several occasions to the working trap of a table, and once suggested the apology of a chair, to serve as the shelf the table should have had.

A table is more useful than anything else, and yet there is nothing about it but pedals and traps to make it extraordinary.

The traps are parts of the table's surface-board, either small or large, or round or square, which noiselessly let down any objects laid on them, and carry them away, so that the opening their movement left can be covered up



instantly by its own quick replacement, or the sliding into its place of a second trap.

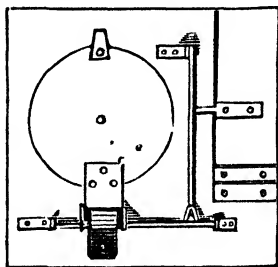


FIG. 113.

The traps can either turn to one side on a perpendicular hinge, so as to cast anything upon them into a bag, or on a shelf at that side, or fall downwards on a

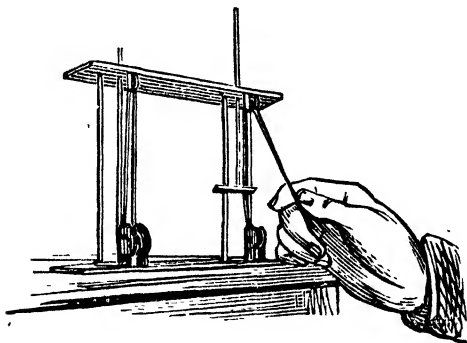


FIG. 114.

horizontal hinge, and drop the article into a bag, or on a shelf, as before.

There are two sorts of pedal movements, one being that of keys, by pressing which, however lightly, a hidden spring is released, which moves an apparatus on the table, or a part of the mechanical object, as if spontaneously. The active end being fitted with nippers, cards, rings, coin, etc., can be removed from the front of

the table, and brought to the performer's hands, while he is busy with another phase of the feat. The second kind of pedal is an unseen apparatus (*see* fig. 114). It is an arrangement of thin, strong, metal piston-rods, which are raised or lowered by threads or cords, rolled around pulley-wheels, and released or drawn tight, at the proper moment, by a confederate in a hiding-place, where the ends of the cords go through the legs of the table. By placing the mechanical figure, or object of the trick, over the corresponding holes in the table, up which the rods rise, they will meet and elevate, etc., the levers of the machinery.

The table should be so elevated that none of the audience can see the upper surface, on which, of course, the outlines of the traps are too fine to be distinguished at a few yards' distance. Hang the sides and front with baize, or velvet, fringed at the bottom hem on the floor, so that the air cannot move its folds.

In ordinary cases, you can have two cloths on; one, very thick and soft, to deaden sound, and the upper one of a light colour, to enable you to see even the smallest scratch on the edge of a coin, or watch, or ring, without trouble.

The shelf, on which articles to be used in tricks are laid, is at the back of the table, unseen and unsuspected by the audience. It is, in fact, a lower table, set under the first, and should be covered with a thick cloth, to prevent sound arising if an object falls on it rudely.

The following dimensions are a sufficient guide:—The table to be five feet long, three feet wide, and the height to about one's waist-band; the traps, three to six inches in diameter. A good joiner will make you one for about five pounds, and you can ornament it to your own taste. Such is the magician's table! Archimedes remarked, when speaking of the lever, with which, among other stories of his mechanical inventions, we have been so often bored in our school-days:—"Give me a fulcrum, and I will raise the world." We can humbly observe: Give us a large enough table, and strong enough traps, and we will make the Ball-eerie Isles disappear, and transform Skye into Asia (you see? Asia—azure! We warn the reader, that he must twist

syllables as well as fingers before he can excel as an expert in the weird science.)

### The Playing-Card Blossoms; or, the Bouquet of Cards.

This is one of the "sweetest," as the ladies will say, and prettiest of tricks. The mechanism is of happy idea and admirable effect.

In an elegant vase, urn, or flower-pot cover, is shown a shrub covered with leaves and buds. Placing it before all eyes on the table, the performer lets several persons choose twelve cards from a pack. They are "forced" cards, naturally. When the persons have written down the names of what they selected, or only mentally recorded them, they are to burn the cards on a platter immediately. The ashes are mysteriously sprinkled upon the tree, when the buds appear to unfold, and presently six cards rise and display themselves like so many flowers; once they are fully shown, a

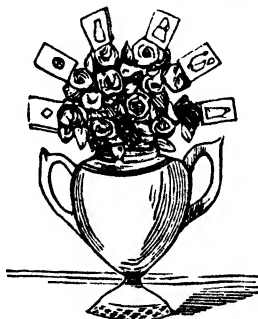


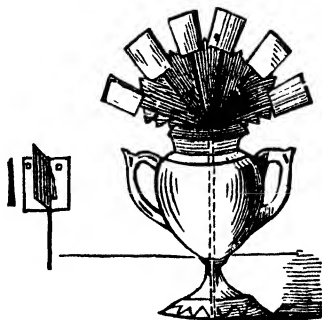
FIG. 115.

second lot of six likewise appear, after the others have fallen off or been removed.

*Explanation.*—On lifting the vase, it will be seen that its base was set upon a triple pedal movement; the first pushed up to about three-fourths of the height of the shrub by a rod hidden by it and its foliage as well as the vase. The rod was formed of six pieces, folding up into one rod, like a fan, terminating each with a catch

to hold a card. When the rod rose as far as stated, a second rod pushed the other up higher, and made the fan-like splits open and display the cards.

But only six have been shown, and the six unsatisfied choosers clamour to see their elects. The third pedal will entirely gratify them. In the centre of each of the six holders, at the end of the *palettes* (as fan-makers call such thin sticks), is a flap on a hinge, which moves from side to side like the leaf of a widely-opened book.



Now, on each side of this leaf are halves of cards, whose corresponding halves are fixed on the plate, in the middle of which it turns. By the third pedal a movement is given like turning a leaf so as to hide one page while disclosing the next following.

### The Satyr's Head.

Farmer Hardtoke and his lady (oh dear, yes, there are farmers' ladies in the provinces, now-a-days) had made up their minds that their girl Nanny should never marry Frank Cherry, the good-looking gamekeeper, but old Peter Snarl, whose account in the County Bank was not to be sneezed at.

Nanny might cry till her eyes were red, and Frank whistle his spirits up, but they did not come; but the stern parents put the banns up, and the day was known.

Snarl had more than a suspicion that his intended would never care for him, and he thought it a good plan to dazzle her with amusements and extravagancies ; and, to further the delusion that he was a gay young dog, he would take no refusal to treat her and her parents to the shows at the fair held in their market town. As he judiciously observed, the most excellent part of the entertainment is that afforded by merely walking up and down in front of the booths, as there are performances on the stages before their entrance not to be seen inside.

One was the tent, or, as the man of power himself styled it, "The Mystic Repository of Magical Experimentalia," and Herr Puzzelwell was an imposing German, almost all beard, not unlike a lion in spectacles whose mane had slipped entirely down under his throat.

Upon his platform was set by his attendant an extremely ugly carved head, like those of the wood-



FIG. 116.

demons of classic times, kept in air by two brass rods, each stuck in its ears, while the other ends rested on glass legs, through which one could see as clearly as through water. The head was undoubtedly without communication with the ground, and certainly the heavens would have nothing to do with the hideous *caput*.

In a powerful voice, the learned doctor began his address :—

‘Noble inhabitants of dis goontry and neighbourhood, I peg to bresent to you de most wondrousful head dat ever was seen. You haf no doubt heerd—at least my friend yonder chewing a straw must haff read in his favourite college pook, ‘Cæsar on de Gallic Bellows!’—dat de chief point in a satire is not in de head. I vill show dat dem *shavants* dat say so are von great hombugs—by de head of my Satyr here introduced, being witty as many und wise as all de worltd. Hem! He vill answer any question put mit him. As he is not a soft speaker like de railway whistle, he vill make de rebly mit a moofiment of his eyes and mout’. When his eyes move, dat vill mean No! but when he open his mout’ from ear to ear, dat will be for Yes! Addention!—is eight de last of de figures? See! his eyes move. He say Nine! He make a fun of me in mein own language.”

So the head responded correctly to several of his master’s inquiries by eyes and—no, not nose—mouth Very startling, but not encouraging to the hawbucks.

“See! I take a back of gards—dirty-two gards—and you will bick out any one you like of dem, and den put him pack again, and I vill not so much as look at him.”

Farmer Hardtoke in much awe selected a card, showed it cunningly to his friends, and stuck it in the middle of the pack. The professor took no time in putting the pack into the mouth of the Satyr, cramming it in with his wand; but, at a wave of the latter, one of the cards was thrust out as if the demon had a dislike for it, and that was the very card the accomplished Hardtoke had chosen.

“The ace of hearts! Ach!” said the German wizard, looking at Nanny pathetically, “so pure a ting as a heart, and so luffy, was not to de ugly yellow’s dastes!”

Whereupon Snarl mustered courage, and, confronting the mask, boldly inquired:—

“Will it be profitable for me to marry?”

The eyes began to roll as if never to cease: that meant “No.”

“But if I were to wed a very nice girl——”

The mouth opened so wide that Peter feared he would be swallowed like an oyster, and he slipped out of the mob and ran home and did not go out after dark for a month. And so the road was clear for Cherry's courtship, and whenever the Herr passes through Wurzel-super-Mare, he is sure of a large slice of bread and bacon and a full mug of cider at Mr. and Mrs. Cherry's!

*Explanation.*—We have described the outward aspect of the Satyr's head. It is merely a pantomimic mask, the more comical the better. The keys of the pedals are in the pedestal, from which rise the glass legs. These supports are hollow, enclosing glass rods moving up and down. They play upon apparatus in the brass rods, one moving the eyes, the other the mouth.

The card which seems to be blown out of the mouth, is hidden either in the upper lip or in the chin, where there is a compartment in which the duplicate of the forced card is secreted, and made to come forth by the release of a spring or the working of a third pedal.

—□—

### The Magic Rope-Dancer.

I present to you an elegant little puppet, who stands erect upon a tight rope, then moves his legs, lifts his

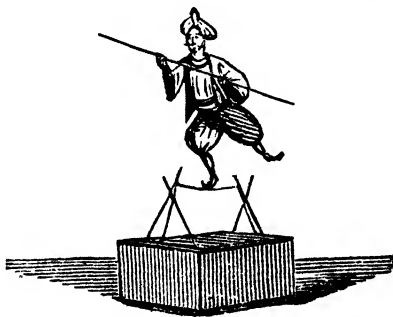


FIG. 117.

balancing pole over his head, and dances as daintily as a queen of waltzers. Mark how he turns his head from

side to side, to see if any one can be insensible to his attractions.

*Explanation.*—The wooden doll, handsomely dressed, is fixed on a tube—not a cord, as believed by the audience—by means of a rod, also hollow, which is always hidden from view by one leg or the other, according to which he does not lift up. Through these tubes run the threads which work the legs, arms, and head of the figure.



### The Miniature Sportsman.

Merit is not to be judged by the stature, as in the case of the Great Napoleon, Tom Thumb, and other generals of note. Therefore, there need be no laughing at my friend in the uniform of Louis XVI.'s guardsmen. He never puts down his gun, and indeed sleeps upon his arms. He does not carry it for mere ornament's sake—oh dear, no!—but for use. I don't mind giving you a specimen of his talent in shooting folly as it flies. "Is your gun loaded, colonel?" (The figure nods.) "Is there any enemy of yours you can pick out in the company?" (The figure shakes its head.) "If you like,



FIG. 118.

we'll bring one upstairs, and you can bring him down. Oh, you don't care about that?" (Figure shakes its head.) "Just as you please. Shall we go through the manual?" (Figure nods.) "Very well. Attention!



Shoulder arms! Oh, you are at the shoulder, and not at ease. Then, present! Take aim! Fire!" (The figure makes the movements, and after pulling the trigger, shoulders arms as at first.)

This action is so exactly performed, that much wonder is caused, and heightened by the careless way in which so precious a prodigy is taken off and put on his pedestal—as if he had acted of his own accord while isolated; but the pedal system was, literally, at the bottom of it all, and the mode of arranging the cords and tubes in which they run, as well as the rods, will be readily understood.

### The Marvellous Musket-Shot; or, The Champion of Wimbledon.

Our diminutive soldier's gifts are not limited to merely letting off a gun, and he can do wonders if he had more than a blank cartridge in his piece. Suppose, instead of mere powder, his gun was loaded with a key, a handkerchief, a ring, or some such article. These named are the nearest at hand, and so we will not seek further. Oblige me with trusting them to Nimrod, junior. As the gun has as wide a mouth as a blunderbuss, we can cram them in very well; the ring on the

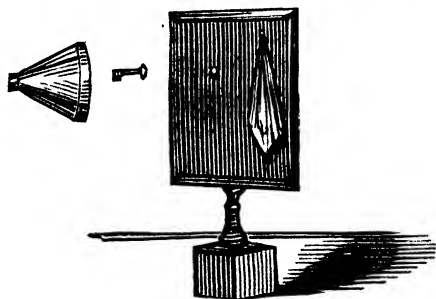


FIG. 119.

key, and the handkerchief stuffed in upon them. Never was there a fire-arm so handsomely filled. As for target, here's a blackboard which will do admirably. We

place it as far as possible from the marksman. "Are you ready?" (The figure nods.) Then, take aim! Fire!" (The figure does as bid.) The shot goes off, and the key, ring, and handkerchief appear on the blind, in the central line. While we congratulate the gunner on his dexterity, our assistant restores the articles to their owners.

*Explanation.*—The automaton's gun has its trigger pulled by a pedal movement, only a cap goes off this time. The barrel seems empty, though the objects put plainly into it are still there, but a second pedal has let a black shield drop at the muzzle and hide them. These objects are mock ones, substituted for the borrowed articles, by means of my table-shelf, whence the real things were removed to be hung on the brass frame on its stand: before the blind had been let down

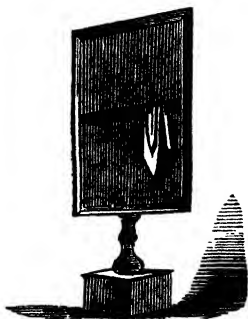


FIG. 120.

an outer one, exactly similar, and kept down only by a small catch at the bottom, as a pulley and spring were wound up to draw it quickly up again. When the cap was snapped, a last pedal released the catch, and the outer blind rose, and was hidden on a roller at the top of the frame and so displayed the articles.

### The Enchanted Target.

The following experiment can be executed by the

performer himself with a magic pistol, described hereafter, but it is much more effective when done by the automaton.

The target is a round or square piece of wood, of any size you please to have it, standing on one leg,

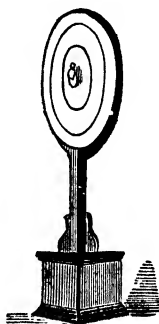


FIG. 121.

white with black rings, and a golden bull's-eye. The back of it is precisely like the front. The central por-

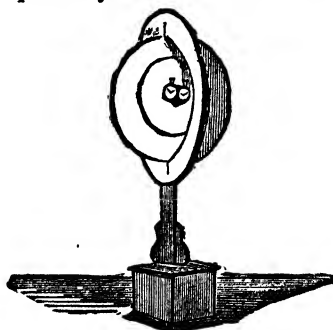


FIG. 122.

tion is cut out along the line of one of the circles, and

is mounted on pivots at top and bottom, so that it will describe a complete revolution on its own perpendicular central line. A spring, when released by a pedal rod, makes the back become the front in an instant.

To perform the trick, a watch or two is borrowed, the substitution made, and, while the magic pistol or the automaton's gun is loaded with the duplicate, the assistant hangs the real object on the rear face of the target, which is placed upon the pedal.

### **The Automaton-Dancer.**

As your automaton figures used in the foregoing feats are not to be handled, it may be as well to be ready with a simpler figure, which you can pass round among the audience.

Have a cardboard figure, very comic in face and limbs, nicely coloured, about three or four inches high, with a pin-hole in the centre. Take a yard of silk, and to one end fasten a fine needle, or strong straight steel wire, and to the other a sharp bent pin or hook. About a foot from the hook end, make a knot too large to go through the pin-hole. Stick the hook unseen in the carpet, within a yard from your chair, and while asking for a tune to be whistled, sung, or played, run the needle through the hole and drop the figure towards the carpet, when it will slide along until the knot stops it. By pretending to beat time with your hands on your knees, you conceal that it is their motion which makes the figure caper to the general amazement.

In the end, put the needle through the hole as you take up the figure, and give the latter to the company. By pricking it through with a pin in other places for buttons and ornaments, detection is rendered impossible. ●

### **The Automaton Smoker, Whistler, and Puffer.**

I beg leave to introduce to you a little gentleman, really no higher than Tom Thumb's knee, and yet the dissipated young scamp makes away with as much of the nice weed as a Swede, Turk, or Dutchman. It is

only because the lad is bashful before the ladies, that he hasn't called for his pipe already. We will be in-



FIG. 123.

dulgent for once, and let him be as uncivil as he likes. Though he is so light-headed, being full of smoke, that we could hold him in one hand, we will set him on the table.

There! there's the stem of a meerschaum sticking out of his pocket—full of tobacco, too. I'll stop his mouth with it. Stay, we may as well first light these two tapers, so that if the draught were to put out one, we should still have one to light the pipe by, in case it was to go out.

"Or rather," suggests Mr. Goody, laughing at his own wit, "for us to see the pretended wonder end in smoke."

But the worthy gentleman's merriment is saluted by such an indignant hiss and such a shrill whistling, that everybody looks round for the noisy interrupter. It is soon discovered that it is the automatic gentleman himself, for he has a whistle plainly between his lips. We make all haste to take it from him, but not before he has bestowed on Mr. Goody a parting blast. If we had not gone to the pains of lighting the candles, we really would deprive the impudent little chap of his pipe; but—upon my word—one of them's gone out! And there goes the other! You young vagabond—I should rather say a young wag-o'-wind—is it you that's put

the candles out? (The figure nods several times.) Am I to put away the pipe without your having a pull at it? (The figure shakes his head quickly.) I shall only look over your offence if you promise to behave yourself until you are moved off hence. (The figure nods.) In that case, one candle will suffice.

There's the pipe in your mouth—and the candle—

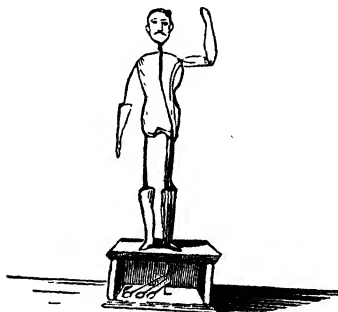


FIG. 124.

does it draw well? (The figure shakes its head.) Oh! I forgot to see if the stem was clear. Now, try again. If at first you don't suck smoke, try, try, again! (The figure smokes.) Ladies and gentlemen, the Genius of Puffery! Have you had your fill? Very well, I'll put

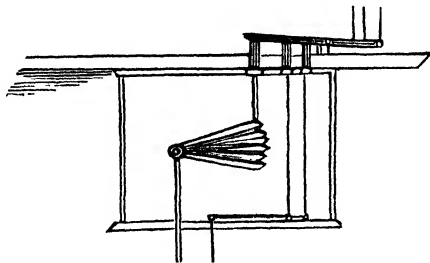


FIG. 125.

the pipe in your pocket, with many happy returns. Since you are so capital an extinguisher, blow out this candle. Well blown, my trumpeter! Bow to the company,

for it is time your pipe was put out in serious earnest. (The figure bows and is removed from the table.)

*Explanation.*—A bellows is concealed in the pedestal of the mannikin, or in its body, if large enough. One pedal works the bellows, as desired by the performer, another makes the head bow, and another makes it shake or nod. Much with small means.



### The Magic Pistol.

Do not be frightened, ladies, at this pistol, for a magician's weapons were never the death of any one yet. And, besides, there's nothing but powder in the present one.

By way of bullet, we will drop into its wide mouth the ring we again trouble you for. If you will kindly put it on this salver, the company will see it up to the very moment when it goes into the barrel. There it is, safe in. I ram it home, and set the hammer so that my

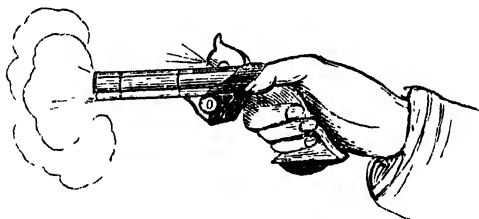


FIG. 126.

friend here—who has kindly volunteered—can fire at me, but—not till I give the word. I only want to be spared until I can pluck yonder rosebud. Ah! I have it, and it will do for a mark. Now, I am ready. Aim straight at me, and fire boldly!

Bravo, sir! That would have made a *bull sigh*, indeed, if the bull was I. The projectile has hit the rosebud in the heart, and so astonished it that it has bloomed. It's a lovely rose, and in turning over its leaves, I rather think I see a ring, for my pretty page to return to the fair owner. Yes, beyond doubt, it is the borrowed jewel.

*Explanation.*—The reader knows how a false ring is to be substituted for the real one, and the former is put into the pistol-barrel, where it remains, but the trigger discharges a second barrel, under the first. The bud is formed of imitation petals, of coloured metals, green outside and rosy within, which unfold on the finger pressing a spring. The ring is picked out of the heart of the flower in the usual way.



### The Sword-and-Pistol Trick.

*To Resuscitate a Bird Shot out of a Pistol upon a Sword's Point.*

Having taken a stuffed canary out of a cage as carefully as if living, hand it to a lady, and beg her to take heed not to stifle it. Alas! the poor birdie has breathed its last in her hand. Hasten to assure her that it has only swooned, and that to cure it of such tricks, made to enable it to shirk its work in our feats, you will fire it out of your pistol. You will load it yourself, because ladies have no taste in fire-arms. Let one of the company, good or bad shot little matters, fire the

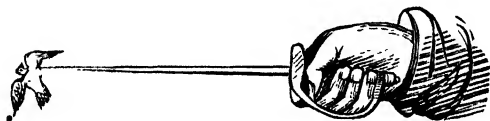


FIG. 127.

pistol directly at the sword's point, held by you steadily before him. No sooner has the shot gone off than a live canary flutters on the point of the blade.

Respect the ladies' illusion, in fancying or believing that you indeed restored the bird to life. You know, as well as your teacher, that it remained in the pistol-barrel while the secret barrel was discharged.

*Explanation.*—The sword is a magical one. In the hilt is a spring inside a drum or case, hidden by the fingers and the guard. A very strong wire runs from this drum, around which it is coiled at one end, up to



the rounded end of the blade, where it is run in at a hole and comes down to the hilt, as if it were the two edges of the sword, like an endless band. A short false point is attached, to hide the turn at the end. The live bird is concealed in a box in the hilt, and when the wound-up spring is released by a flourish of the sword in the opposite direction to the drum's revolution, the wire carries the bird to the tip of the sword.

(To colour birds' plumages for such tricks, see the following.)



### To Change the Colour of a Bird's Plumage, or Petals of a Flower.

Have glass jars with narrow rims near their mouths, large enough to contain the bird you mean to put in, suspended from the opening by the neck. You will require, also, large corks or bungs, which will fit the mouth of the vase. To perform this experiment on a bird, begin by making a hole in the cork, large enough to hold the neck of the bird, without strangling it. Then divide the cork into two parts, so that each piece has in it one-half the circular hole: you will thus be able easily to place it round the bird's neck without running the risk of injuring the creature. Do this, and then put in the bottom of the vessel one ounce of quick-lime, and on it a quarter-ounce of sal ammoniac. When you see the effervescence begin to take place, put in the bird, letting the cork which is round its neck fit tightly in the neck of the vase. The plumage exposed to the vapour of this effervescence will become impregnated with different colours, produced by the combination. Withdraw the cork, and the bird, as soon as you perceive, through the glass, that its feathers are turning different colours, which will be in the course of two or three minutes. You will run the risk of suffocating the bird, if you expose it to the fumes for a longer period.

In changing the tints of a flower, you need only draw the stem through a hole in the cork, so as to keep it suspended in the vase for two or three minutes, which, in this case, as well as in the preceding, will suffice.

### A Magic Picture, representing alternately Summer and Winter.

Draw on cardboard a landscape scene, in which the ground, the trunks of the trees, and the branches, are painted with the ordinary colours, appropriate to the subject; but draw and wash over the grass and the foliage with the liquid below described. You will then have a picture which, in the ordinary temperature of the air, will present the aspect of a country during the winter, when trees and earth are deprived of their verdure. Warm it sufficiently, but not too much, and you see it covered with leaves and herbage as in spring.

For the liquid for producing this effect,—

Take some zaffer, that is, that metallic earth of cobalt which gives the blue colour to zaffer, and which may be obtained at any wholesale chemist's, and *digest* it in aqua-regia. Dilute this mixture, which is highly caustic, with pure water, and use it to paint the verdure of your picture. It will be invisible until warmed, when all the parts touched with it will appear in green.

### A Colour which Appears and Disappears at Will.

Take a glass bottle; put into it some volatile alkali, in which you have dissolved copper filings, to produce a blue liquor. Present the bottle to some one to cork, jesting a little with him, and, to the great surprise of the company, it will be observed that the colour disappears as soon as the cork is put in. You easily make it reappear by uncorking the bottle, which does not seem the least surprising part of the matter.

### The Magic Likeness.

Take a slightly convex glass, such as is used to cover a portrait or hair devices in a bracelet, and another piece of the same size, but of ordinary glass, very thin. Cover the concave side of the first with a composition made of lard and a *very* little melted white wax, mixed together. Fasten the two glasses very exactly, the one over the other, so that this composition is between them;

and join them by binding the edges together with a bit of pig's bladder, fastened with mouth-glue. Let it get perfectly dry; and after having cleaned the glasses well, put a photograph, a miniature, or any other picture you please, under the flat side. Afterwards, have it put into a frame, which will entirely conceal the binding of the edges.

*Performance.*—When you warm the picture a little, the composition you have introduced between the two glasses becoming liquid, is also rendered entirely transparent, and you perceive the subject of the picture with perfect clearness. Otherwise, it conceals the portrait, just as if there were a piece of white paper under the glass. It will appear and disappear as often as you choose, on making it warm, or letting it get cold.



### To Impale a Card on a Sword.

Ladies and gentlemen, I have no doubt you have heard by telegraph, speaking-trumpet, or newspaper, that there was an Irish soldier who boasted that he was so skilful in fencing, that he had parried in a heavy shower every drop of rain that would otherwise have soaked him. I bought at a sale this very same Excalibar of the Hibernian's heirs, for I came to the conclusion it must have been an enchanted glaive, as told of in Arthurian legend.

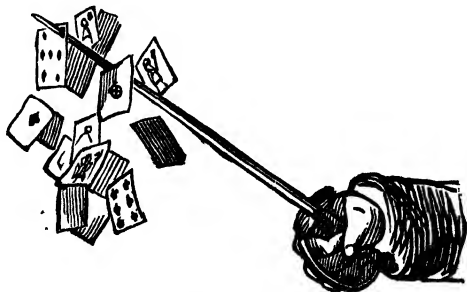


FIG. 128.

We shall exhibit a proof of its mystic virtues, but not by umbrella practice.

Please to select a card from this pack. That's well! I mean this lady. A hundred apologies, for the gentleman so highly perfumed is rather a soldier than a dandy—a Scent Guard. Let your neighbours see it, while I get my Emerald 'Isle'd sword. Have no fear; if I commit regicide, it will only be on a pasteboard king. You will kindly return the card to the pack, and shuffle it well. Oh no, you need not give me the pack—merely throw them over my head towards me, when I count three. Now then! one, two, three!

A palpable hit; for you see I have transfixed the seven of spades in its *heart*—the identical card you selected. Thanks for your approbation, but no common blade would have cut out its work so well.

*Explanation.*—Instead of the bird, as in the previous sword trick, a card is placed on the hilt-guard attached to the wire, which carries it to the point upon a wave of the sword, rapidly executed.

### The Ring-Dove.

You require two live birds of the size of sparrows, or so, and several false gold rings.

You borrow a lady's ring, the plainer the better. In putting it on your table, you exchange it for your false one most like it. You let the company load a pistol with powder, a ball with a hole in it, and a bit of ribbon by way of wad. While this is being done, you go to the cage for a bird, and at the same time tie the real ring to the neck of one, and taking out the other, put it in a trap-box, which you cover with a hat. Take the false ring to put it in the pistol, bending it between the teeth to make it of a suitable shape. Then, holding the trap-box at the open window, you release the bird, and fire the pistol after it. (Of course, you only pretend to aim at it.) Next, you bring the cage to the window and pretend to whistle the bird back into it. Then you show the other bird, as if it were the fugitive returned, which has the real ring attached to its neck, and the bullet to its leg with the bit of ribbon.

*Observation.*—The perforated bullet is used so that the bird can be detained in the cage, though you open

the door ; and the two pieces of ribbon must be exactly alike.



**The Magic Boxes ; or, The Twelve Boxes one Inside the other.**

To send an object invisibly into a box, will, at the present stage of your instruction, seem but child's play. But what will you think when we borrow a watch, a ring, or a coin, marked if the audience like, and shoot them or otherwise despatch them, in an instant, into the innermost of twelve boxes, contained in one another, so



FIG. 129.

that eleven of them have to be unlocked before the kernel is extracted in which is the article?

We ask for some article, and receive it on our changing salver. As we return to our table, we execute the exchange, and put the ring, for instance, on the secret shelf of our table, whence our confederate gets it.

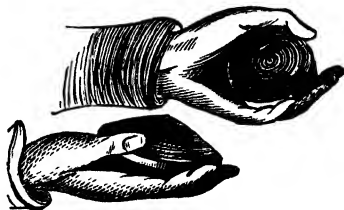


FIG. 130.

While we are chatting briefly with the company, he has plenty of time to do his task, which consists in

putting the borrowed ring in the place where it is to be found. But the reader understands that if he had to lock up twelve boxes and enclose the smallest in the next larger, and so on, he would take so much time that there would be no wonder in the trick. Therefore the boxes are composed of covers which fit into one another, just as the other parts severally agree, and so each collection of lids and of boxes form one thing, so that on bringing the twelve lids down on the twelve boxes, all are closed at the same time, as quickly as an ordinary box.

We call, and the assistant brings them, prepared. We take the false ring off the salver and pretend to throw it at the boxes—if we do not use our pistol—but really pass it secretly out of the way. The multiplied box is then handed to the company. But though it was closed all at one time, it is impossible to get at the innermost without unlocking each one containing the next smallest, and the spectator who undertakes the labour is easily pleased, if he considers his trouble repaid by the agreeable surprise which he and all the bystanders will feel on seeing the ring really inside all the solid enclosures.

We here picture the boxes in their simplest form; but they can be constructed of other shapes, and with formidable spring-locks.



### The Goblet of Millet-seed.

There is shown to the company a small bag of millet-seed and a tin measure, two inches deep by one in diameter. The measure is filled, and, after being stood on the table, covered with a hat. The seed is commanded to leave the measure, and go into a goblet upon the table. The hat and goblet being raised, it is shown that the millet has really left from under the former, to appear in the latter.

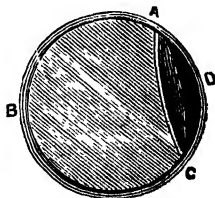


FIG. 131.

*Explanation.*—The goblet has a false bottom, A B C D, soldered to the interior at the points A B C, but the

part *A D C* moves on a hinge *A C*, or on two pivots *c* and *A*. The point *D* catches the inner edge, so as to hold it, but lets it go when the goblet is struck moderately hard upon the table.

The outside of the bottom of the tin measure has millet-seed glued on it; so that, though really empty, it appears full when set on the table upside-down.

When plunged into the bag it is really filled, but the contents are poured out by inclining it towards you from the audience; but at the set time it is turned upside-down, and, therefore, only carries the seed glued to its bottom, and a few loose ones heaping it up. On setting it down, the wand pushes these off, while smoothing it, and the measure seems brim-full.

In covering it with the hat, it is turned top up unseen, so that it will be clearly empty on discovery.

To put the goblet on the table unnoticed, upset a goblet in doing some trick, and in pretending to pick it up, substitute the one with the millet, which will resemble it.

### The Boxes of Millet Seed.

Have a small box turned (Fig. 132), about two inches high, and composed of three separate parts, *A*, *B*, and

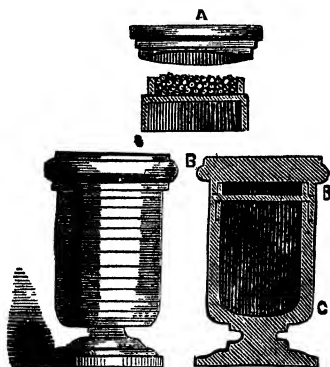


FIG. 132.

*c*, in such a manner that you can open it by lifting

the lid A alone, or with it the lid B,\* which ought to have a small rim on the upper part, on which you can put a layer of millet-seed, so that it will appear as if the box were filled with it: while, when both the lids, A and B, are lifted, it will seem as if the box were empty.

Have another box, about three and a half inches high (Figs. 133 and 134), composed of three parts, A, B, and

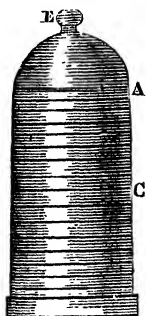


FIG. 133.

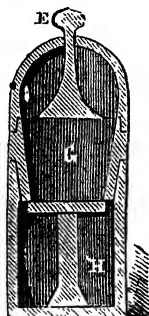


FIG. 134.

C; and let the lid A be fitted with a small trap, D, which can be lowered by pressing on the knob E, and by this means allow the millet, enclosed in the empty space of the top, F, to escape into the first bottom, G; then, by slightly raising the part B, you may allow the same millet to find its way to the space H (you will notice the section of these three parts of the box detached from each other in Fig. 135), so that it now appears as if the box were empty. Have, besides, a small bag in which to put the millet.

Open the first box (Fig. 132) at the proper place, and show that it is full of millet; you may even add to it a little out of the bag, as if you desired to make it quite full; shut it with the lid, and put it on the table. Then open the other box (Figs. 133 and 134), and show that it is empty, shut it, and in the act of placing it on the table, manage to touch the knob E, that the millet, which was previously placed in the space F, may fall into the

\* The box ought to be made so that these different lids are not observable.



cover. Then announce that you are going to make the millet, shut into the first box, pass into the second.

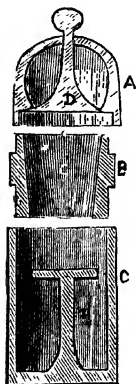


FIG. 135.

Open the first box, and show that it has already disappeared. Open the second, and show that it is there. Then propose to make it go back to the first. To effect this, cover it, slightly raising the part B. Then open the first box, to show the millet in it, and the second, to prove that it is empty.

**To Make a Ring Change Hands, and Pass on to any Finger you please of the Opposite Hand.**

Ask one of the audience to lend you a gold ring, begging him at the same time to mark it, that he may be able to recognize it again.

On your side have a gold ring, which you fasten by catgut to a piece of elastic or a watch-spring, sewed to your left-hand coat cuff.

With the right hand take the ring lent you; then dexterously take hold of the ring, inside your cuff, attached to the watch-spring, and pull it to the ends of the fingers of your left hand, unperceived by any one; during this operation you conceal the borrowed ring in

your right-hand fingers, and put it on a hook fastened on your waistcoat, near your hip, and concealed by your coat; then you will exhibit the ring you have had concealed in the left hand, and ask the company on what finger of the other hand they desire it to pass.

While asking this question and receiving the answer, you put your finger on the little hook, and let the ring slip on it, at the same instant letting go the other ring by opening the fingers. The elastic, being no longer forcibly expanded, will contract and draw back the ring under the cuff without its being perceived by any one, even by those who may be holding your arms, who, being desirous only of preventing your hands from touching each other, will afford you sufficient freedom for all the movements you require. These movements should be rapid, and always accompanied by a stamping of the foot.

After this operation, you hold up the ring which has found its way to the other hand, and prove to them by its mark that it is really the same one.

Much address, and great rapidity of movement, are necessary, in order to succeed in performing this amusing trick that no one may suspect your imposition.

### A Pass Trick with a Die and Counters.

This trick is, unquestionably, one of the prettiest ever invented. It is, in some sort, composed of six different tricks, which, being performed consecutively, must make as great an impression on the eyes as on the minds of the spectators.

Is it not, indeed, surprising, 1st, to be witness of a die disappearing from a place whence it was impossible for any one to remove it; 2nd, of counters quitting, invisibly, a hand in which you have seen them placed; 3rd, of finding these counters where nothing but a die had been placed; 4th, of finding these same counters in a hand which was apparently empty; 5th, not to be able to find these counters under a dice-box where they had been placed, and which no one could have touched; and

6th, to find the die in its first situation whence it had disappeared?

*Explanation.*—Procure a die, and twenty tin counters, about the size of a shilling.

1st. Have a small cylindrical box, of copper, paste-board, or tin, large enough for the counters to enter it, and sufficiently springy and flexible to allow of its sides being compressed by the fingers, so that dice being put in, they will not, when so held, drop out, even when this cover is held with the opening downwards.

2nd. Fifteen counters pierced with a central hole sufficiently large for a die to enter, and soldered together so that, being surmounted by a counter which has not a hole, they may look like a pile of ordinary counters; you may also procure a similar hollow pile, and a dice-box with iron or copper wire round it, and a counter at the top. (See Fig. 136.)



FIG. 136.

3rd. Throw a half-sovereign on the table; put the die into the box, shake it a moment, and throw it also on the table; then give the box and die to one of the company, begging him also to throw, to see to whom the money shall belong. This is merely a blind, to prove to the audience that it is a regular dice-box without any machinery or deception, and that there is no die in it prepared especially for conjuring.

4th. When they have thrown several times, take the box, and beg some one to place the die on the coin.

5th. While they are placing the die, you, with the right hand, bring the box quietly to the edge of the table, and with the left take the false pile of counters and slip it under the box.

6th. Place on the table, for an instant the hollow pile and the box, the latter alone being visible to the spectators.

7th. Lift the box, compressing it slightly, to prevent the counters from falling, and place both over the die.

8th. Take in the right hand fifteen counters, which you hold at first at your fingers' ends, and then quickly slip to the hollow of the same hand, bringing the left near to it. This hand instantly closing, the noise made by the counters will lead the spectators to think that they have changed hands, and are no longer in the right one.

9th. To avoid any appearance of awkwardness arising from keeping the right hand shut, you hold your wand in that hand, resting the end against the left hand, as if motioning the counters to leave it.

10th. Then command the counters to leave the hand, and pass under the dice-box standing on the gold coin, and send away the die whose place they are to take.

11th. Open the left hand, to show that the counters are no longer there; and instantly, without giving the audience time to consider that they may be in the right hand, lift the box, without any pressure, showing the false counters lying on the half-sovereign.

12th. If the precaution has been previously taken to put two or three loose counters on the top of those soldered together, you may throw them on the table, one after the other, saying, "Here is one for the waiter, one for the cook, and one for the boots. Honest folks must live, even if they haven't a thousand a-year," etc. This will further the delusion, making the audience think that it is a pile of common counters, and that the die cannot be concealed in it.

13th. Replace the box on the gold coin, covering the false pile of counters, and order them to leave the box and go through the table, that the die may take its own place.

14th. Put the right hand under the table, and make the counters rattle, that the sound may prove they are no longer in the box.

15th. Throw them on the table, and lift the box, compressing it at the same time, to raise the false

counters with it. The spectators, seeing the die re-appear, will think that the counters have gone to make room for it.

16th. Draw the box to the edge of the table, allowing the hollow pile to fall on to the knee, after which you carelessly drop the box on the carpet, that every one may see that it is empty. But do not descant upon this subject, to prevent suspicions arising, and leave the audience to make their own remarks.



### A Wonderful Excuse for Awkwardness.

We will suppose that, in being handed some jelly on a china plate, you have spilt some on the cloth. Immediately rises a murmur, in which the words,—“What an awkward fellow he is, to be sure!” may be distinguished, and you will always find one party spiteful or stupid enough to ask you, in a tone like the pricking of a needle, “How could such a thing have happened?”

You must boldly assert that the plate is so thin that your ice or jelly has soaked through it. Your assertion will be received with a laugh of incredulity: but you will certainly have the laughs on your side if you propose to prove what you have advanced, and do so as follows. Place before you four balls (or four soft bread-pills about the same size as the balls used in conjuring), and place on each side of you a plate turned over.

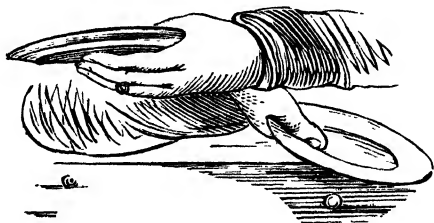


FIG. 137.

Then say that it is possible to make the balls pass through them.

Take a plate in each hand (still holding them upside

down), the thumb above, and the forefingers beneath, that is, under the bowl of the plate. With the right-hand plate cover one of the balls placed on your left; instead of leaving it under the plate, as all will think, take it up between two of the four fingers which are naturally concealed under the plate you are still holding. With this hand (the thumb and forefingers kept in the same position) take hold of the plate held in the left hand, and place it over one of the right-hand balls. (Secure under this place the ball kept between the fingers; nobody will observe it, since they are still concealed.) Then take with the right hand one of the balls remaining on the cloth, pretend to put it in the left hand (*see* "Conjuring the Ball," Fig. 41), but keep it between two fingers of the right, and say that you are making this ball pass under the right-hand plate, which you will lift, with the right hand, immediately afterwards, showing the two balls there. (In putting down the plate again, you leave under it the ball you had in your fingers.) Do precisely the same with the last ball that is visible. Then pretend to take the fourth, which is supposed to be under the left-hand plate, and to throw it under that of the right hand, which, when raised, discloses the four all collected under it.

### Balls Passing under Coffee-Cups.

Our awkward friend, Mr. Goody, who saw us several times perform the preceding trick, one day had the misfortune, while dining with a party, to break a splendid china coffee-cup.

"Well! it does not matter much," said he to the lady of the house. "I have a much handsomer set for sale at my shop, and if you like to buy it, you shall have it at a bargain. It will more than replace this set which is spoiled."

"I highly valued mine," replies the lady, who does not relish this funeral oration over her crockery.

"You are wrong, madam," returned he, unmoved: or, remembering the trick with the plates, he thought he could achieve his purpose by the aid of

*white magic*; and adds, "your cups were cracked long ago."

"What nonsense!"

"I will prove it, madam, if you will order two plates to be brought to me."

"How?"

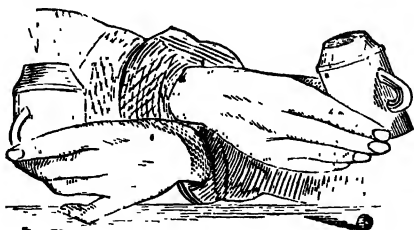


FIG. 138.

"By making bits of bread pass through them!"

"But that would not prove that my cups were cracked," returns the lady, mistrusting the proverbial awkwardness of her visitor, who remains silent.

And yet why had he not asked for cups, and performed the same trick with them, as shown in the illustration?

### **Marvellous Production of Oranges and Blossoms; or, The Magic Rosebush.**

In a miniature tub we show our magic tree, at present covered with luxuriant foliage alone, though at points peep out the buds. At their tip a speck of white appears; it enlarges, the buds open, and silver stars stud the green surface. We wave our wand, and the silvery light vanishes before a throng of sunbursts; bright apples of gold glow on the mass of leaves—the buds become blossoms, the flowers fruit.

Let's pick an orange. Lo and behold! I no sooner divide it than out falls the handkerchief I borrowed from you, madam, ten minutes ago, and which, by the way, I cut up and burnt, and shot out of pistols so shamefully!

*Explanation.*—The buds are made of painted iron,

the leaves made to open out on being pushed forward by a wire attached to a rod, worked as before described.

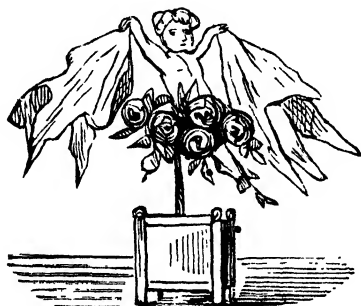


FIG. 139.

The first rod puts aside such leaves as hide the buds; the second opens out the buds; and the third thrusts other sprigs and leaves so as to mask the buds, and to open out to discover oranges, and a little image of Cupid waving scarves.



### The Spring-Gun.

In former times, when locks were of clumsy make, and the inadequate police-guard of cities made monied men very desirous of unbribeable servants, much inge-

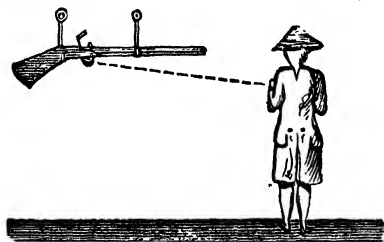


FIG. 140.

nuity was directed to the invention of inanimate guards and sentinels.

Such an alarm, of the simplest description, we present



for curiosity's sake, and perhaps it may be useful in miniature for the destruction of rats, or such small deer, where no human being can be endangered by contact with the apparatus. A gun or pistol loaded, and the hammer at full cock, has a wire or cord running from the hair trigger to the safe, cash-box, or cupboard likely to be broken into. So, if the gentleman here shown in Mr. John Sheppard's costume, attempted an entrance into a stranger's clothes-press, he was likely to be peppered and salted for the rest of his life besides giving an alarm that would spoil his projects.



**To Colour a White Glass Ball after it has Passed into a Bottle, with too Small a Neck to Admit it.**

A bottle is shown half full of red wine, and with a rather long thin neck, much too narrow to let in the glass ball which is held up in view, without the help of magic. Let us try to squeeze the ball to the proper size. There, it must be about right now. Yes, you see it has slipped down into the bottle. You can't help believing the fact, for the wine has turned it red as soon as it covered it. But suppose we wanted the ball back



FIG. 141.

again? We can try to squeeze it through the glass at the bottom of the bottle. There! we again succeed, only the ball has of course lost the red tinge it received from the wine, and is white once more.

*Explanation.*—In pretending to squeeze the ball smaller, you let it fall behind your table on the shelf (*see* the description of the Magician's Table), and in pressing the bottle on the table, it takes up in the hollow at the bottom a red ball, placed conveniently for the trick.

### To Pound a Watch in a Mortar and Restore it Intact.

You request some one of the company to lend you a watch, and put it immediately into a mortar; a few moments afterwards you bid another person pound it with a pestle; you exhibit the wheels, face, mainspring, and drum-barrel broken and smashed; yet, in a few minutes, return the watch, safe and sound, to the proprietor, who recognizes it.

After what we have shown, it will easily be surmised that the mortar must be placed near the trap in your table, and covered with a napkin, in order that the confederate may substitute another watch.

To produce a complete illusion in this case, you must take care to put in the mortar a second watch, resembling the borrowed one. And this is by no means difficult; for you can either have an understanding with the person lending the watch, or you may manage to ask the loan of some one whose watch you have had an opportunity of examining shortly before, with a view of procuring a similar one.

After replacing the fragments in the mortar, cover them a second time with the napkin, and amuse the company with a riddle or conundrum, or by some other tricks, to give your confederate time to collect all the bits, and replace the perfect watch in the mortar.

### The Egg or Ball Box.

A B is an oval box, divided into two parts, c D; the cover, D, contains three parts, E, F, G, which imitate half an egg, and fit into one another, like the cups in Fig. 142.

The conjurer shows the empty box, as seen, c, when

he lifts these three parts in the lid, *D*. But if he leaves one on the box, this box will appear to contain an egg, as at the point *H*; and as the three half eggs

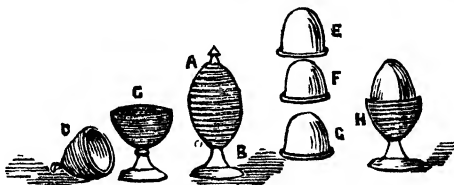


FIG. 142.

are of different colours, the egg may appear to be white, red, or green, according to whether you leave one, two, or three on the box. By this means, if the conjurer holds in the right hand the cover, *D*, and in the left a box, containing apparently an egg, as seen *H*, and lifts the egg up towards the mouth, as if about to eat it, and at the same time dexterously slips it into the lid, *D*, he will, a moment after, appear to have only the empty lid, and the equally empty box, *C*, so that he will appear to have eaten the egg. Complete the illusion by moving the jaws, as if eating; of course, however, the trick does not consist in *eating an egg*, than which there is nothing more natural, but in persuading the audience that you *have* eaten it, and then exhibiting it to them again, whole, in the box.

### The Obedient Card-Cases.

This string-and-box trick is very simple, and yet excites much bewilderment and applause.

Many of you gentlemen—for ladies pay little attention to such things—have believed, up to the present time, that water, when filtered, is only good as being superior to the unfiltered water added to wine by tricksters. A profound error, as deep as the Rolling Zuyder Zee, as will be made clear to you all. We will once again call upon our fifty-two allies. Please pick out several cards. One, two, three, four. That will be

plenty. Each will remember his card, and so replace them in the pack.

Here stands upon my table the decanter of filtered

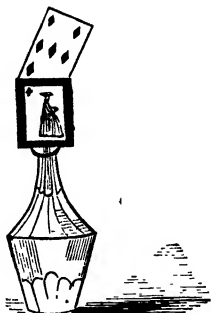


FIG. 143.

water I spoke of for the experiment. You will at once perceive that, instead of a stopper, there is a box or frame, which is a holder for the pack of cards. I shall now trouble the gentlemen to call their cards in the order they were drawn, as the magnetic force of water filtered, according to the instructions of Professor Lully Paracelsus Chuzzlebuffin, my renowned teacher, will make them instantly rise out of the pack. "Seven of diamonds!" "We are seven!" "Ace of clubs!" "If there be *one spot* on earth more clubby—I beg pardon, lubly—than another, this is it!" "Nine of spades!" That is the gentleman. And "Queen of hearts." I believe those are the chosen cards? Certainly.

Though I have said that filtered water has the magnetic power of which you have beheld the effects, I find that I am not believed.

*Explanation.*—The box or case is in two parts: the front one contains the pack used for the forced cards, to be drawn from; while the other holds another set, unseen by the spectators, and prepared as follows:—

A long black thread is taken, and one end wound several times round half a dozen cards, in the middle of them, lengthwise, so as not to come off; the last turn brings the thread to the top of the six at the back of

them. Any card is laid behind this lot, and the thread brought down its back, and on it put the card last to be

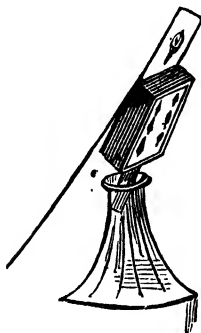


FIG. 144.

called; lead the thread up it to its top, then down on a chance card, and up on the third called card, and so on, interleaving the four. When the last one has had the thread go under it and up behind it, the thread is run through a small hole in the top of the back of the case, and thence goes off to the concealed confederate, who has but to pull the string.

### The Enchanted Card-Tables.

Born in the land of cards, and cradled in a dice-box, magic often associates the fifty-two pasteboards with its astounding experiments.

You, with a view to humour your patrons' whims, take the pack to the audience and force two cards, let us say, an ace of spades to a gentleman, and a queen of hearts to a lady. We take these two cards and lay them, one on the left of us, the other, the queen of hearts, on our right, each on a little round card-table on three legs, known sometimes as a magic stand, at others as an enchanted *guiridon*.

After having shown beyond doubt that the cards are really where they were put, we cover them at the same

time on their respective stands with a tin cover, declaring that the cards being of a roving disposition, the queen of hearts will invisibly pass from the right to the

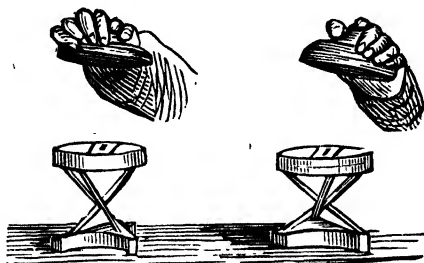


FIG. 145.

left at the same time as the ace of spades will pass from the left to the right. On immediately lifting off the bell-shaped covers, it is discovered indeed that the former card has displaced the second, while the latter has gone to take the other's place.

*Explanation.*—Only a wizard (if he did not know the trick), of course, could guess that the table-tops, apparently so thin, are really double; and that under the

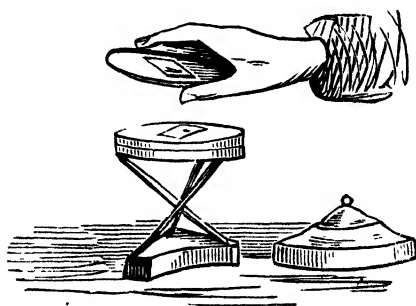


FIG. 146.

upper board, entirely unattached to the lower one, and a little larger than it, was previously put that card

destined to be substituted for the opposite one of the pair which seemed to have been chosen at hap hazard.

The covers, of which the lower edge laps the upper table-tops, carries them clear away on being lifted up.

Instead of cards, coin, ribbons, or any thin flat object, can naturally be used.



### The Magic Rose.

One of the gentlemen<sup>e</sup> in the company being asked to exhibit his skill in gunnery, you hand him your magician's pistol, loaded before his eyes, and cull a rosebud off a tree, on your table. You stand off a few paces and hold up the flower for him to aim at it. Ready! take good aim, and fire coolly! Bravo, my obliging friend! You have hit in the gold, as your sisters say at the archery meetings. The shot has hit the bud so as to make it open in full bloom.



FIG. 147.

Well, I never! There *rose* in the *rose*, when you fired, the very ring we crammed into the pistol some time ago. There can be no mistake about it.

*Explanation.*—It is no news to the reader that the pistol has been described (*see* page 199); but the rosebud which suddenly becomes a full-blown flower deserves a revelation. When the ring was borrowed, a false one was rammed down the pistol-barrel, where it remained; but the real one was put into the rosebud, before it was picked for display to the company.

The stem of the bud has a spiral spring inside it; the petals are of sheet-iron, and are moveable. The outside is painted green, like leaves, and the inside

rosy, like petals. The pressure of the finger on the end of the stalk makes the petals open, and the rose, blooming as by enchantment, holds the ring in its core, like a golden heart.

### To Produce a Rose in a Clear Glass Vase; or, The Surprising Qualities of Horticultural Crystal.

Roses—and other flowers, in a less degree—which have been in the eyes of poets, and of other good folk, the emblems of beauty, are also the ephemeral satellites of pleasure, and as fleeting, alas! To entertain the fair sex, nothing is more appropriate than flowers. We choose a rose as the heroine of our present experiment.

It is designed to force from the gullible human mind the ancient belief that the queen of our gardens must, like her lowly subjects, grow out of the dark and not particularly cleanly earth. Now, as far as that goes, the rose has been as badly slandered as crystal, which has, up to this time, only had the reputation of being a brilliant, transparent body, nice enough to look at, if you like, but quite useless for horticultural purposes. We are going to knock these two prejudices on the head.

Here is, very conveniently for our example, a fine bit of crystal, cut into the form of an ornamental vase or cup. You can see clearly through it, and so must acknowledge that it is empty. The cover, of the same material, is equally innocent. I place it tightly on it.

Yet, on merely whisking this magic-wove scarf over the glass on the stand—for Nature has secrets not for mortal eyes—the crystal becomes productive, and a rose has appeared and bloomed in the glass.

*Explanation.*—For, though all the roses from Rosedale Abbey to Roseheartly were to lose their perfume, and all the crystal from the Palace of that name to the unfathomable depths below were to burst into shivers—we must explain, that we have slandered Calumny.

The rose shown in the vase was plucked off a bush grown in the black, cold earth; the end of its stalk, designedly bent, was fastened head down to the end,



farthest from the audience, of a *trap* (as used in trap-and-ball), or spoon with a long handle. The handle end is weighted, but held in its place by a catch, placed

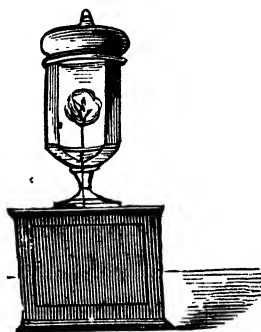


FIG. 148.

in the upper part of the pedestal, which is a sort of square box, open entirely on the side farthest from the audience. The scarf enabled the performer, unseen, to touch the trigger that released the *trap*. The spoon end pushes the rose up in a semicircle towards the vase. The latter has a longitudinal opening in it, imperceptible even at a short distance, and through this the rose entered the crystal enclosure in a very matter-of-fact way. It is sometimes a pity to have our illusions dissipated—"into thin air," we mean!

### Pick-me-up Cups.

With the instruments and pieces of mechanism we show to the reader by pictures and ample explanations, he can vary and multiply many feats which we have previously taught him to perform by other means.

We here treat of the "pick-me-up" cups, whose uses will almost be suggested by the sight of them. They are made larger than those cups of which illustrations have been presented in our explanations of the cups-and-ball or *thimblery* tricks (which see), but are

generally of the same shape—that of a truncated cone. In the inside is a clapper, or handleless spoon, or merely a catch in the shape of a cockle-shell. This, playing the part of one's hand open to grasp an object, is held by a catch to one side of the cup, which catch is released by pressure on a small knob on the top of the cup. This is a very handy instrument for carrying

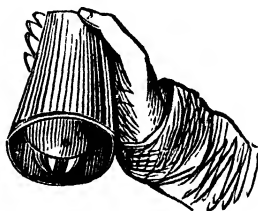


FIG. 149.

away any object under the very eyes of the lookers on. The magician covers the article, which must not be too large, of course, with the cup, which has been *set* beforehand, presses the knob which releases the catch, and the spoon, describing a semicircle, springs to the other side and nips the object, which will have disappeared in a miraculous manner, when the cup is lifted up. A cup or two similar in shape, but without the interior spoon, are useful for leaving about, so that, in case of their being examined by the bystanders, they will be nicely disconcerted.



### The Golden-hearted Pippin, and the Cup of Grain.

#### *A Double Surprise.*

*Problem.*—A borrowed and marked coin and an apple, lemon, or orange, to pass unseen some twenty feet and enter a cupful of rice, sand, or seeds, and yet when you take up the cup it will be found empty, except the apple, in the core of which will be the borrowed half-sovereign.

*Solution.*—Immediately substitute another coin for the borrowed one. While you rattle on about the trick having an Oriental origin, and the first inventor having

been the Sultan's favourite, and able to perform with a vase of seed-pearls and a ruby as big as a peach, your assistant off the stage makes a small deep cut in an



- FIG. 150.

apple, and pushes in the coin, which has been passed to him. This prepared fruit is placed in the bottom of a boxwood cup, filled up to the brim with rice, and all this brought on the stage.

The performer shows that the cup is full of grain; declares that, spite of that, he will soon find room for the apple. The pippin and the duplicate coin are then made to disappear. The cup is taken up. "Oh! I have rather overdone the thing," he says; "for, instead of merely enough rice vanishing to give King Pépin room to lie, it has all gone, which is surp-rice-ing! Still, here is the apple. I have but to open it, and—I believe, sir, this is the half-sovereign you entrusted to me."

*Explanation.*—The disappearance of the rice is due to the co-operation of a piston-rod, which is pushed up a valve in the bottom of the cup, so that the rice runs down the hollow stem into the empty foot of the cup, where a second valve is closed by the withdrawal of the piston-rod.

### The Enchanted Billiard Balls.\*

*A New Mode of Playing Billiards: for the Benefit of those not liking that Game.*

The worst of billiards is, that not only does it require skill and considerable practice, but some activity of foot; for the change of positions of the balls compels the players to follow the red and white globes around the green arena. This may be highly agreeable exercise for everybody but those who want a sedative recreation, and yet like to display their powers of *cue-rions* *exe-cue-tion*. To such, and to all others, too, the following mode of playing billiards, without having to leave your place, is suggested.

You will require a globe, mounted on one small leg, as in the illustration, divided into two parts, so that the upper half can come off altogether. Also a solid ball, of the requisite size for going into it, and filling it up. The ball once in, nothing else can enter, and the cover being set on the ball, we will have made assurance doubly sure.

Our wand will serve as cue; and, with one tap of it, we are going to send the ball to pocket, spite of its being closed up in the box. At first sight, we grant you, that seems impossible; it is slightly difficult, especially if you do not know how it is done. But see! the box

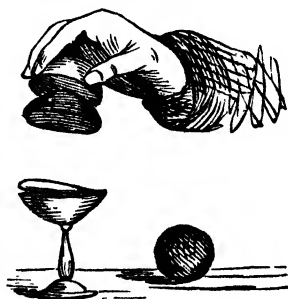


FIG. 151.

being uncovered, the ball has certainly vanished. Cover the emptiness, make a drive with the wand, open it

again, and the ball has returned. We take it up, and send it round to be inspected by the company.

*Explanation.*—The solid ball is let fall, either upon one's knees, if seated, or on the shelf of the table, when a feint is made of putting it in the box. The box may appear to be empty, but there are really in it two half-globes, hollow and very thin—mere shells in fact—one in the upper half, one in the lower half, of the spherical box. When you wish to show that the ball is in the box, you press a catch in the upper half, and, as it pushes the upper inner shell down upon the lower inner shell, so that the two join and become like one, the resemblance to a billiard ball is perfect.

### The Vase of Cream; or, The Fairy Dairy.

In order to give you embarrassment, it might occur to some one to suggest, when you have magically produced tea or coffee out of some bewitched material, that some milk or cream would be acceptable.

Quick to take advantage of such an occasion, you set before the audience your marvellous vase of cream.

It is a plain round box, which has been nearly filled to the brim with cream, or milk, covering the contents

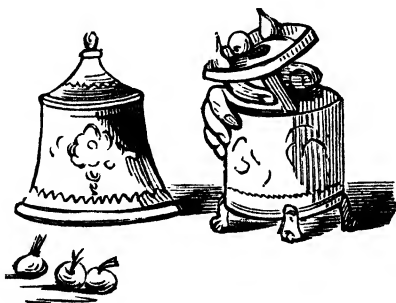


FIG. 152.

with a sort of funnel, of which the pipe part, closed at the lower end, goes down into the liquid without dis-

placing any quantity of it worth mentioning. Into this lid, so to call it, or false bottom, the performer puts any unlikely articles he pleases to use, such as beans, peas, onions, etc.; and to make it be thought that the box is quite full of them, thrusts down the middle of them, in the pipe, his wand. The vase is then covered with a tin bell, a few waves of the wand made while the prodigy is being accomplished, you declare, and the bell is taken up, with the funnel inside it, held by sheer compression.

Then the milk or cream can be poured out to all who defied your mysterious powers. • One would have to be void of all milk of human kindness to (s)cream out against your pleasant jugglery.

### **The Three Magic Pyramids ; or, The Infallible Method of Ensuring the Purity of your Wine.**

Not one of us can rely on having wine unadulterated, at least by water. Even the maker, if a wine-dealer as well, will, from dint of habit, have baptized his grape-juice with Adam's ale. But the grand art of magic enables us to be beyond doubt in our selection of drinkable fluids. If we have watered sherry or port set before us, our science gives us the power to divide the water from the wine. We hasten to acquaint you with the process.

Into this decanter we pour some wine, and to prevent its purity, for a wonder, upsetting our calculations, we will add a glass of water. The decanter is placed on this pedestal, and on either side of it we set a glass. With these three horns or hollow pyramids, we cover the decanter and the glasses. To make the experiment more wonderful, we will allow the audience to point out into which glass they desire the port to transport itself, and to which glass shall go the water. Ah! thank you; the wine in the left-hand glass, and the water to fill the other. Oh! I can feel the secret power at work; it has begun! 'tis proceeding! now 'tis done! We remove the covers, lo! the caraffe is empty! And, just as you wished, the wine has passed into the left-hand glass and

the water into the right. A hint to the lovers of the unsophisticated vintage.

*Explanation.*—In the bottom of the decanter is a hole,

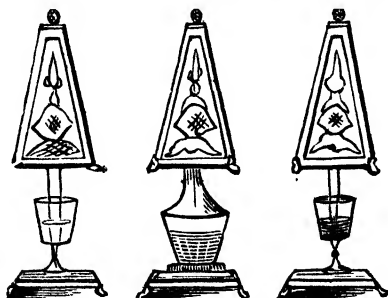


FIG. 153.

to let the reddened water flow out into the hollow pedestal on which the decanter is set, when a ball of wax used to stop up the hole is removed, that being done when you put the horn over it. This horn is a simple one, but the two to cover the wine-glasses are only half-hollow in the lower part, while the upper portion of each forms a conical box, divided into two compartments, each with an aperture at the base. This box, by means of the division, can and does contain wine and water in each pyramid. By the same physical phenomenon of the pressure of the air which, when you want to draw wine from a full pipe, forces you to pierce two holes in the cask, the liquid will not escape from one of the compartments by the aperture spoken of, except at the moment when a corresponding hole is unstoppered in the top edge of the pyramid: this hole is stopped with soft wax. When the company's selection of the glasses for wine or water has been made, you have only to take away, according to what is to be in the right or left hand glass, the stopper belonging to the compartment reserved for wine, or to that for water.

This trick can be varied by using, instead of wines, lemonade, milk, water in which bright-coloured dyes

have been infused, etc. The material of the cones can be either papier-mâché, light wood, or tin, painted and gilt at pleasure. The pedestals are merely tin trays on feet. The cost will be less than half-a-sovereign, especially if you decorate them yourself, while the dealers in such articles would charge two or three guineas for a secret you have here for a trifle.

### The Inexhaustible Bottle.

Who has not, in his youth, when the world-renowned Hokey Pokey, ex-King of the Cannonball Islands, and present Monarch of the Realm of Magic, came forward with his inexhaustible bottle, asked for a thimbleful of sherry, madeira, lemonade, brandy, whisky, ale, or milk, and had it poured out for him, too, among the different draughts for fifty others, during full fifteen minutes? And who, not having shared in the performance of the feat, has not heard or read of it? Scarcely one of our readers. There are volumes of commentaries and suppositions upon the proceeding, and many an inquisitive genius has sought for the secret of the miracle without finding it. We propose to enlighten you entirely upon the subject.

The mysterious bottle of a hundred liquors contains five compartments, quite separated, and with a small tube as the outlet of each, which runs down the neck almost to the mouth. Up a line, parallel with its sides, there is a series of holes, like those of a flute or fife, corresponding with the divisions. Here again is applied that principle of the pressure of the air on fluid bodies which is the active agent in the preceding feat. As long as the holes are stopped up, the contents of the five compartments cannot flow out.

*Preparations.*—In four of the compartments are put such liquors as are most in vogue, and in the fifth water, in which a little lump sugar has been dissolved. A space is left in the centre of the bottle for wine. When the wine has been all poured out to the spectators—using very small glasses, which hold scarcely more than two thimblefuls—much astonishment will be caused by



the magician saying that he can still supply any quantity of different liquors to the still unsatisfied.

*Performance.*—You take up the bottle in such a way that your five fingers stop up the five holes spoken of, they being made convenient for that purpose. For precaution's sake, you will have committed to memory the order of the liquors, by the alphabetical sequence in the first letters of their names; for instance, brandy would be B; curaçoa, C; gin, G; maraschino, M; rum, R; or 1, 2, 3, 4, and 5, either making the orifice covered by the little finger or that by the thumb first or last, as you please. Every time one of the liquors in the compartments is called for, you lift the finger closing the small hole necessary to set the desired liquor flowing; and when the glass is full, stop it up, to go on to open the next one named. There are cases when some liquor will be called for which you have not got, but the sweetened water will baffle that puzzler's attempt to catch you tripping. Some of the glasses with which you will have the salver or tray filled, classed regularly, have at the bottom of them a drop or so of such essences as will give the sugar-and-water the flavour of the desired drink. There will always be persons among the audience whose reputa-



FIG. 154.

tion as wine-tasters is founded on mere assumption; and these are the more easily deceived, as they will hasten to

declare their surprise at tasting *Château Cheatem*, of such unheard-of savour, out of the mysterious bottle.

This trick has been varied to enable the performer to pour milk, tea, cocoa, chocolate, etc., out of tea or coffee pots, but it is only the shape of the vessel which has been altered, as the principle remains the same in all.

### The Favours of Bacchus ;\* or, The Bottle of Wine and Ribbons.

As we come forward among you, bottle in hand, the ladies, above all, will not hasten to accuse us of coarse tastes, for we know quite well that Bacchus is not the divinity of the soft sex, and that his donations are not thankfully received. We hurry to pour out every drop of the good old Burgundy that filled the bottle, and send it away, which will quiet all injurious comment. But stop a bit ; the wine being gone, what if the spirit of wine—not the spirits, mind you—still pervades his last abode, ready to appear palpably in some agreeable shape ?—which would be a piece of gallantry on the part of Bacchus, to make amends for any ill-conduct on his part.

Already the spirit is transformed, and leaps out of

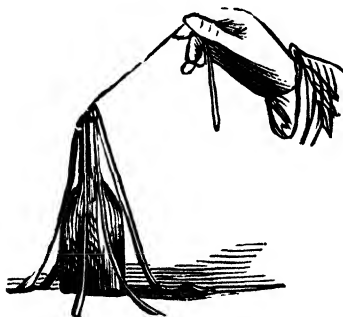


FIG. 155.

its glass prison—first a sky-blue ribbon, now a roseate hue, now orange, now France's tri-colour, now our scarlet,

then the Italian green, and any favourite colour you please to name. The shade of Bacchus is not particular to a shade. Cerise, lilac, ponceau, the newest tint—all are here! What, more! snow-white, pearl-grey, violet, olive, ruby—the god's polite offering is not to be measured by inches, but by yards.

*Explanation*, forced upon us by Mr. Goody, who has seized on our bottle in an unlucky moment, and as he, having for once perceived a secret, would be sure to divulge it, we hasten to forestall him.



FIG. 156.

In the first place is an outer case, either an opaque glass bottle without a bottom, or tin painted with black glaze, into which fits a second bottle, pushed in at the bottom. In this are set a dozen reels or bobbins, on which are rolled ribbons of all colours. One end runs up to the mouth of the bottle, where there is a small ring, which it passes through, a knot then preventing it slipping back. The performer has only to pull the ribbon of the desired colour. Mr. Goody also spied out that there was a largeish compartment up the middle of the bottle, closed at the bottom, but open at top, where the wine was hidden until it was poured out.

### **The Magic Stewpan; or, The Wonderful Reviving Birds.**

You show to the audience half a dozen or so of small stuffed birds, and a stewpan, into which you put the

canaries, finches, or sparrows, as the case may be. On your table you place a spirit-lamp, which you light, and over it hold the stewpan, on which you put the cover, turning it magically while you make your harangue.

Ladies, you seem to be somewhat affected by the fate of these innocent creatures, created pretty and lively, to flit about from one rose bush to another, and not to be cooked in a villanous saucepan! But, ladies, magic



FIG. 157.

would be unworthy of entertaining you with its marvels if it were capable of such a cruelty as to let the harmless creatures be consumed. A wave of our wand will convert the scorching flame into a radiance of life. You can fancy you hear their chirping now, amidst the sound of the flame. I hasten to lift off the cover—when, behold! the birds have returned to life, and fly off to and fro with many a joyous flap of the wings.

*Explanation.* not for the ladies of the company:—The stuffed birds remain in the bottom of the stewpan, where no eyes can see them, but their living counterparts were shut up in the cover. Though the cover is shaped plainly, there is room for an enclosed space inside it. A round plate, movable freely, is the false bottom of it, fitting tightly. Pressure upon a knob in the top of the cover releases the plate, which falls to the bottom of the stewpan, as well entirely covering

the stuffed birds as permitting the living ones to fly about unfettered.

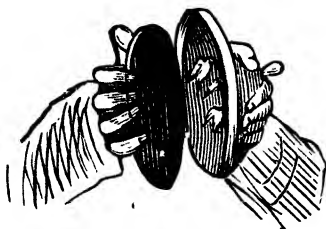


FIG. 158.



### The Wizard's Cauldron; or, The Animated Dinner.

Before we part, I should really like my friends to taste of my culinary successes. I shall take pot-luck out of this kettle, hung, as you see, on a hook and hanger, like the gipsies' apparatus for boiling down game and farm-yard fowl. The kettle is empty—as any of you may see—and I think I had better put something in towards filling it. Water is cheap—so I'll try

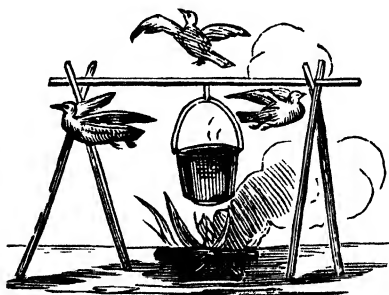


FIG. 159.

a pailful. If one won't do, here goes two! and three! There, it's full now, and I clap the lid on, and light the

flames of spirit of wine beneath. You are already laughing, and I even hear Master Dicky ventilate his deceitful slang in pronouncing the result. What a sell! My fine little friend, the fire burns so merrily, that I really believe it does not see any joke in the performance. I lift up the lid a little, to see how the broth is thickening, when I can't see a drop of water, and I hear the flapping of wings. And there fly ducks out of the kettle—a pretty kettle of fish—I mean fowl—it is. Magic forgot to pluck them for our dinner.

Hark! we understand the ingenious Mr. Goody to acknowledge that he has been trying to perform this feat for the last twenty years, by previously putting into the kettle some ducks which he had deprived of all liquid aliment for a fortnight before, in the expectation that the poor thirsty birds would drink up all the water, which would then have vanished; but fancy a duck flying nimbly after a gallon of water drunk at a sitting! No, as Mr. Goody can only torture the poor creatures, and then drown them, we advise another method of proceeding.

*Explanation.*—One of the rods supporting the kettle is hollow; one end goes down through the floor or stage, and the other end is hermetically soldered. In the cross-bar also is a tube; into this is riveted the hanger, hollow as well as the kettle handle, which, lastly, is prolonged into pipes which go from each side down to the bottom of the kettle. An air-pump makes a vacuum in the different tubes, which amount to the same as one straight pipe, and the water is drawn off till not a drop remains. The ducks were concealed in the lid of the cover, precisely as the small birds were in that of the Magic Stewpan.

### The Magic Punchbowl.

We have succeeded but poorly with our cauldron, not even a cupful of broth resulting from three pails of water, so I doubt that we can redeem our reputation by the manufacture of punch. However, we shall try.

Since water is useless for one thing, we will not

employ it for another, but fill our largest bowl with handkerchiefs, roses, fans, newspapers, and all such ordinary components of punch. What! you never heard of such being recommended? An error. Any way, we

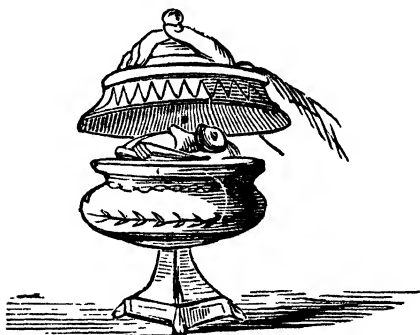


FIG. 160.

will put the cover over the bowl, for fear dust is hurtful. Eh? upon my word I caught a whiff of hot rum! There again, I lift off the cover, and the bowl is a-fire!



FIG. 161.

It is a lake of flame! Quick with the glasses! Ladle it out! Keep on ladling it out! The more I take out, the fuller it gets! I continue, and yet the untired spirits

rise! Why, there is actually more in than there was at first! My friend, do you give up trying to empty it? Very wise of you, and I shan't be a whit more obstinate.

*Explanation.*—The bowl has two deep dishes inside it, one below the other. The upper one held the handkerchiefs and fans, and was carried away when the lid was removed, that action striking a friction match, which ignited the vapours of the heated liquor in the second dish. Between this receptacle and the lining of the bowl itself, is a space filled with punch, the level of it being above that of the liquid in the dish: the communication is by a valve which is opened or closed by the pressure of a knob outside.

Proportionably to the removal of the punch in the dish, the second quantity of punch, by the opening of the valve, in seeking to find a mutual level with the rest, adds to and raises up the beverage in the bowl, and makes it seem inexhaustible.

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## PART V.

### SCIENTIFIC AMUSEMENTS.

*Secrets of Magnetism.*

#### The Magnetic Opera-glass.

**H**AVE a turner make you an ivory opera-glass tube, so thin as to let the light shine through inside—the length two and a half inches, and about the shape given in the illustration.

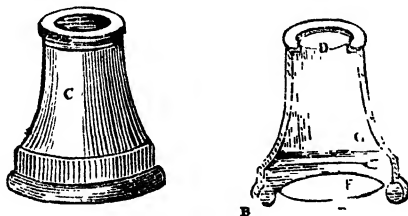


FIG. 162.

The top, *A*, and the base, *B*, should be “flush” with the tube, *C*. The glass, *D*, has a focus nearly as long as the tube. The ring of ivory, *E*, is open, to hold a plain glass, *F*, covered on the inside with black paper. and a

small cardboard circle. Put a pivot, *F*, in the middle of the circle, and on the pivot the magnetized needle, *G*, a little shorter than the diameter of the circle. Cover the circle with a watch-glass, which will prevent the needle getting off its pivot. You will now have, apparently, a single-barrelled opera-glass, looking through which you will really see, by means of the magnifying-glass at the small end, such letters or figures as are traced on the cardboard circle inside the bottom of the tube. Apparently, however, the looker sees objects hidden in different closed boxes, as will be explained in what follows.

When this prepared spy-glass is brought within a certain distance of a magnetic bar, or a box in which is a concealed magnet, the magnetized needle will point necessarily in the same direction as the bar, and indicate its north and south—the north of the needle being the south of the bar. This effect will take place whatever the wood or metal of the box around the bar, as the magnetic fluid will penetrate the most compact bodies without being altered in direction, always excepting iron, which it will penetrate, but its direction will be altered. But the bar must not be too far from the needle, particularly if the latter is very small; and the pivot of the needle must be held or placed above the middle of the bar, or else its direction will be false, especially when there are more than one bar within, of which the influences might unitedly act upon the needle.



### The Miniature Calculating Boy.

Have a box made of the hexagonal or six-sided shape here given, *A*, *B*, *C*, *D*, *E*, *F*; the diameter from eight to ten inches, the depth three-fifths of an inch, and reserve for the edge a ridge, so as to frame a plate of clear glass, which should rest on a level with the top of the ridge. Construct a board of wood, *G*, *H*, *I*, *L*, *M*, *N* (Fig. 164), the same size as the box, and three-tenths of an inch thick, and glue to it a border a little projecting over the sides, so that it will fit the bottom of the box closely on every edge. There is also to be a cover to the box, merely to protect the upper surface.

Paste paper down on the interior surface of the figure (163), and draw a dial-face, with an outer band, which you will divide into twenty-four (24) equal parts; to



FIG. 163.

begin which accurately, draw them diagonally on the supposed line, *A D*, *B E*, *C F*; divide into four equal parts the portions between those lines, and write the

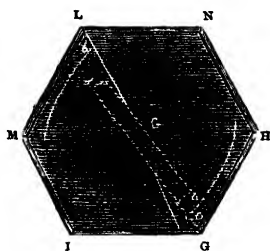


































FIG. 164.

figures 1, 2, 3, to 24, in the order shown in the model. Make a very small mark outside the box at the angle corresponding with number 1. Fasten a pivot to the centre of the box, and on it set a magnetic needle, covered with a small card figure, *H*, cut out in profile and painted prettily, holding in one hand a dart, or arrow, pointing to the north of the needle. Draw on the board (Fig. 164) two lines, *GL*, and *HM*. From the centre or point of section, *G*, describe the circle *GHLM*, and make the segment, *GH*, its eighth part, and the opposite segment, *LM*, the same arc. Draw the straight line *ab*. Hollow out the board so as to hold the magnetized bar, *LN*; wax it and cover it with paper, as well

as the other side of the board, so that the bar cannot be seen. Make a small mark on the paper at the angle towards which points the south of the bar.

Take a piquet pack (the thirty-two cards of which a list is given immediately after this paragraph), and write on the backs the figures 1, 2, 3, etc., up to 32, bearing in mind that the figures are to be in a certain relation to the degree and colour of the cards which are inscribed with them, as follows :—

1		9		17		25	
2		10		18		26	
3		11		19		27	
4		12		20		28	
5		13		21		29	
6		14		22		30	
7		15		23		31	
8		16		24		32	

Besides, write on twenty-four small squares of such thin

card as is used for visiting cards the figures 1, 2, 3, etc., to 24, inclusive. Their use is, being put on the board, to give you the excuse for lifting the box up off the board, as if to take note of the points indicated by the calculating boy.

When the box is set upon the board in each of the six different positions it may take, the dart held by the miniature figure, H, will stop at the numbers 1, 2, 7, 8, 12, or 21; and if these numbers are borne in mind, you may from them tell any one between two of them, inasmuch as you have only to place that side of the angle of the box which has the little mark, towards one or the other of the six angles of the board, for the mark made on the board to inform you which is that angle. It will be equally easy to learn what is the chosen number, since (according to the table above given) the card's nature and colour will denote the figures on it precisely, and you will have only to remember the order and colours of the cards. For instance, if the ten of spades were selected, the person must have taken the number twenty-one (21).

To perform the trick, hand a party the thirty-two cards of the picquet pack for him to choose a number. He having put his cards on the board, you tell by the colour and nature of the card the number he selected, which we will in this case suppose to be 21 (or the ten of spades). Having privately reckoned that of the six numbers you gave as names to the six positions of the box on the board (namely, 1, 2, 4, 8, 12, and 24), only the three, 1, 8, and 12, will make 21, added together, the box is to be set upon the board in a position that will cause the little man to point at 8. Open the cover and show that it does point at 8. Close the lid, and lift up the box off the board, to take up the little card on which is marked 8, as well as to give you, as aforesaid, the pretext for lifting the box off to perform the secret stage in the feat. Put the box on the board again so that the figure shall point at 12. Continue to get the 1. Adding the amounts thus found, 1, 12, and 8, you have 21, the number on the card selected. So you can repeat the operation, taking out as many of the small cards as required to make, by the addition of the figures on each of them, the amount on the card chosen.

It is to be clearly understood that, whatever number a person selects, it may be formed by some of the six numbers 1, 2, 4, 8, 12, and 24, the only ones denoted by the figure which is made to move by the concealed bar. Unless, however, the box was set on the other face, that is to say, the under side of the board, by which the six different positions would produce other numbers with which all the numbers from 1 to 32 could not be composed. Nevertheless, this other side enables you to indicate at one time the numbers 9, 10, 11, 15, 19, and 21. Therefore it follows, that having seen that one of these six numbers was selected, you can let the person decide whether he will be told the number at once by the calculating boy, or by several of his pointings.

*Note.*—If by error a larger number was given out than was required, you can appear not really in fault, by again putting the box on the board in such a way as to indicate the excess of that number, in order to subtract that increase from the total number which the figure failed to directly denote. If the board were made the top of a table, you would have a pretty, as well as useful, piece of furniture for your magical apartment.



### The Flower Box.

*To Tell which of Two Flowers have been placed in a Box, hermetically closed, or that neither was so put in.*

Procure a round case, ten inches high by three in diameter, as in the illustration. This case, *b*, is the cover to a glass shade, and the little vase, *c*, and fits the base, *a*, tightly. The vase, *c*, has a hole in it, into which can be inserted the stem of two artificial flowers, say a white and a red rose, *f* and *g*. To make the stalks, use polished steel wire, highly magnetized, bearing in mind that the north pole of one of these stalks should be downwards, to go into the vase, and the other upwards, to go into the flower; cover with green silk, and tie on little sprigs of wire, also bound around with silk, to which attach the leaves and blossoms.

When one of the two flowers (or bouquets, as the principle remains the same with twenty flowers so constructed as with one), supposing *f*, is placed in the box, the north of the wire in the stem will be downwards,

as will be the south of the wire in the stem of the flower g. From this it follows that, by approaching to the

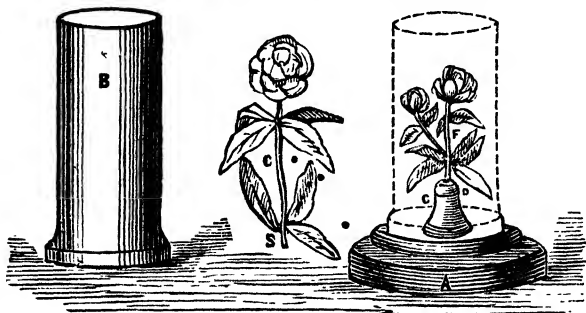


FIG. 165.

box the Magic Opera-glass, described previously, the direction of the needle within it will indicate that of the flowers; while, if neither of them were put in, the needle will tell you that fact also, from its not pointing steadily.

To perform the trick, you present the box and the two flowers to a person, leaving him free to secretly insert either one he likes in the vase, and return you the box tightly closed in with its cover. You look at it with your opera-glass, and by noting in which direction the needle points, you can tell which flower was put inside.

### The Magic Sovereign Box.

Have a box large enough only to hold a coin or two, such as are commonly called "sovereign boxes." Take a half-crown and bore a hole with a drill transversely through its diameter, from edge to edge, and force into it a well-tempered and magnetized darning-needle. Drop a little pewter on the opening made, groove it with a file, to imitate the milling, and no one will perceive that it has been in any way tampered with. But if you look at the coin with the Magic Opera-glass, previously described, the needle within it will take the direction of the magnet embedded in the piece of money.

To perform the trick, ask of one of the company a half-crown, skilfully substitute for it your prepared one,



and give it to another person to hold, as if this were the borrowed one. He is either to put it in the box or not, and you propose, without touching the box, and merely by looking at it with your spy-glass, to tell whether the piece was or was not shut up in the box. If the concealed magnet makes the needle move, you know the coin is in the box.

*Observation 1st.* The needle in the opera-glass naturally points to the north, like that of a mariner's compass, and so it is essential, before bringing it near the box, to look at its situation, which will alter as the coin is approached. Nevertheless, if by chance the needle in the coin happened to be at that moment in the direction of the magnetic meridian, the trick would fail.

*Observation 2nd.* The needle in the opera-glass must be extremely sensitive, on account of the needle in the coin having no great attractive force. You could perform the trick with the coin in a snuff or tobacco box, but too deep a box might trouble you in executing the feat.



### The Intelligent Fly.

Have a walnut-wood box made with six sides, A, B, C, D, E, F. The size is eight or ten inches in diameter,

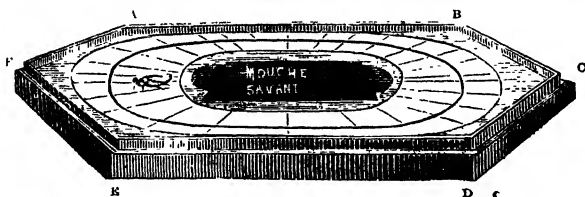


FIG. 166.

and one-fourth or one-half of an inch deep. Let there be a narrow ridge all around the edge, so that you can lay a plate of glass level upon the top surface. And have a cover to it to protect the face and glass from injury.

Have a board, G, H, I, L, made in the same form and size as the box, an inch and a quarter thick; run a narrow ridge all around it, so that the box will fit squarely into it, whether upside down or not.

Paste paper on the bottom of this box, and draw a

circle like a dial-plate, which you will divide into twenty-four equal parts; to do which, draw from angle to angle

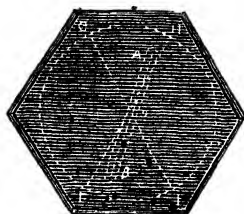


FIG. 167.

the lines A D, B E, C F, and divide into four equal parts each of the six portions of the two outer rims so marked in these twenty-four spaces; write the names and colour of the twenty-four cards of a picquet pack, from which has been discarded the sevens and eights\*. Bear in mind to place them in the order given in Fig. 168. Put a dot, P, on the side of the box where the queen of hearts is placed, so that you may find it by touching the box.

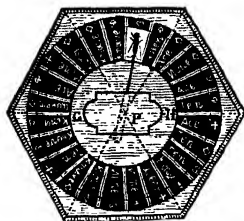


FIG. 168.

Draw on the board (Fig. 167) the two lines G I, and H L, and describe from the centre, P, the circle G H, I L. Divide into quarters the arcs G H and I L; and having halved the two divisions diametrically opposite, namely, A and B, draw the line A B. Hollow out the board along that line, and place in it a strongly magnetic bar, six or eight inches long; conceal it by covering the board with fancy-coloured paper.

\* Other games can be also played on this plan, but the reader's own ingenuity will enable him to substitute such a game as is most often played in his neighbourhood.

Set a pivot in the centre of the box, and on it mount a magnetized needle of the shape here shown, ending in a very fine point, on which can be fastened a natural or artificial fly. The needle is only pierced with a little hole in part of its length, so that it will keep its balance, and need not be perforated like a compass needle.



FIG. 169.

Cover the part of the glass which is consecutive with the dial-face, with a circle of paper (Figs. 167, 168), so as to hide the needle, and only show the fly, as if it of itself walked around the dial-face. Make a mark on the side of the dial-plate where the queen of hearts is.

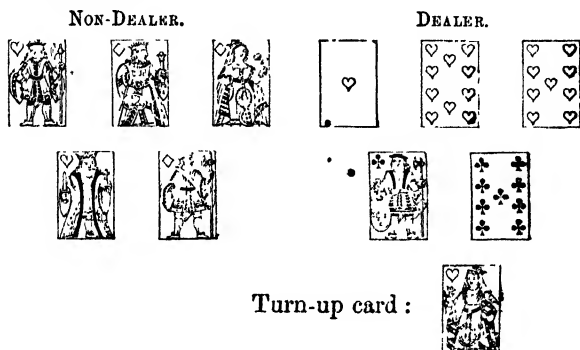
Remove the sevens and eights from a picquet pack, and arrange them as follows:—

1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	

(A large card.)

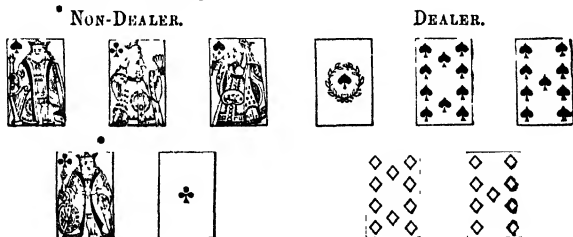
(A large card.)

From the above order of arrangement, the pack can be dealt out, without shuffling, first two at a time, and then three, to play a game of *triumph* (*trionphe*, the original of the old English game of "trump"), so that the hands are:—



Consequently the dealer will win, as he can take or out-trump every card in the other's hand, providing that he plays the cards not trumps after the cut. There is no need for him to know his antagonist's hand.

The pack being supposed in the aforesaid order, the performer of the trick makes the other party cut by the *long card* (see Long Card, previously described), and deals out the cards by twos and by threes, so that there will be the following hands:—



Turn-up card :

When the box is placed successively on one of the sides of the board, in each of the six positions possible, the needle on whose point is the fly will point in the same direction as the bar in the board, and consequently it can be made to point to the turn-up card, and each of the five in the pack of the performer. The construction of the box also enables one to make the fly point out, on the other side of the board, the cards used in the second round; you have but to pay attention to the mark on the board, and the point adjusted to the box, in order to avoid being deceived by the different positions, and learn which is the card on which the fly ought to stop.

*Performance.*—You propose for some one to play a game of triumph with an intelligent fly, which you assert to have been trained at card-play, and is kept in the box. Put the box on the board in the suitable position. Pretend to shuffle the pack (*see* “False Shuffling,” in the card recreations). Let the opponent cut or not as he pleases. Deal out by twos and threes, show your antagonist the turn-up card without looking at it yourself, and put it upon the board without discovering the figure. Place the box so that the fly must point to the turned-up card, lifting the cover to show how faithfully the fly obeyed. Remark that, so far, he has seen nothing; for your intelligent fly far surpasses all the learned or automaton insects on record, not excluding the celebrated iron fly of Regiomontanus. Having pronounced this name of a noted mechanician of the dark ages, without dislocating your jaw or straining your tongue, return to the solemn business.

Ask the other party to play, and if he passes, say you will stand; and as he is the eldest hand, bid him put his card on the board without telling what it is. Without caring to know, you make the fly point to one of the trumps you hold, and play it, and proceed with the regular game. After the first round, shuffle the cards without really mixing the unplayed lot; have them cut at the long card, and use the unplayed ones, and employ the back of the board: this using up the rest of the pack will seem very extraordinary. By making your adversary lay his cards on the board, or

putting yours there, you get the excuse for lifting the box so as to change its position.

### The Box of Enigmas.

Let a box be made three inches square, and half an inch deep, with a lid on hinges. In the middle, and out of sight, set a magnetic needle, E, F, which you mask



FIG. 170.

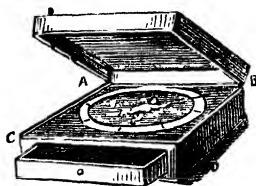


FIG. 171.

with a small figure of a Cupid holding a dart, with his hand to the north of the needle. Cover the top of the interior of the box with a plate of glass, to keep in this figure, and paste on it a ring of paper, divided into eight equal parts, in each of which you write the solutions of the eight enigmas hereafter given, in the order designated by the illustration.

Fit a drawer to the box which will hold one of the four cardboard tablets hereafter described. Take four pieces of cardboard (Figs. 172, 173, 174, 175), of a size



FIG. 172.



FIG. 173.



FIG. 174.



FIG. 175.

to go into the drawer, which you mark in eight equal parts on the circle within their sides, and in each set a magnetized bar, with the poles disposed as the four models show. Cover the two faces of the tablets with other cards, which you fasten neatly on, binding the edges with fancy paper. Write on the front and back

of each the eight enigmas, so that each tablet will have two enigmas, in such a way that, on being put in the drawer, the little Cupid will point to the answer of the enigma written on that face of the card which is upwards in the drawer.

Having presented all the tablets to one of your company, beg him to read and try to guess the enigmas, and to put one secretly in the box, engaging that the Cupid will find out the answer before he does. Of course, you can show at once that the figure has pointed to the solution.

The eight enigmas here given are only to show the principle of the trick, as any others will do as well. The box can be constructed for twelve enigmas instead of eight, by making one more division and using six tablets.

### ENIGMAS.

#### 1st. *On the first face of the first tablet.*

The king is my subject,  
 The victor my slave ;  
 I hurl down the strong,  
 And conquer the brave :  
 I deal Romeos death,  
 And inspire the toast,  
 And wreak the most harm  
 On those love me most.

LOVE.

#### 2nd. *On the first face of the second tablet.*

We brothers are, quite speechless,  
 Yet many a word we pass ;  
 In company work, although  
 Part are of the higher class.  
 The red roof over our heads  
 Is smooth as a croquet-lawn ;  
 Our prison-door often opes,  
 But we stay till out we're drawn.

THE TEETH.

3rd. *On the first face of the third tablet.*

In the world I make some noise  
 At every step I take,  
 And with no legs or wings  
 With my master journeys make.  
 If I suit him very well,  
 He wishes to have me old ;  
 And yet, to last him more,  
 I very oft am sold.\*

SHOE.

4th. *On the first face of the fourth tablet.*

Often I 'm stolen, but yet I 'm left  
 Where I was before happened the theft.  
 Enclosed in a chest, remote from the light,  
 I die whenever I 'm brought into sight.

HEART.

5th. *On the back of the first tablet.*

Like a long thin snake I trail  
 Along my figure frail ;  
 I respect to none accord —  
 I 'd trip up a gouty lord.  
 In my holes I rest all day,  
 But at night I come away.

BOOT-LACE.

6th. *On the back of the second tablet.*

In the palace I am found,  
 And the hut ; e'en on the ground.  
 The world, when weary, seeks my peace.  
 I 'm the child's warm friend ; the old  
 Rate me so, too, when all 's cold,  
 And for me pluck the fowls and geese.

BED.



7th. *On the back of the third tablet.*

When my *first* is at its height,  
 My *second* should be strong,  
 To get its ardent power under;  
 And my *whole* 's a thing of might.  
 No eyes to it belong,  
 Yet sight; no tongue, but voice of thunder.

FIRE-ARMS.

8th. *On the back of the fourth tablet.*

No one drowns in my oceans,  
 None till on my broad downs;  
 I own not a hovel,  
 Yet I boast of huge towns.  
 I reduce to an inch  
 Mile on mile of great works,  
 And I range at my will  
 From Australians to Turks.

MAPS.



### The Magnetic Clock.

Have a clock-face made on both sides of a stand, with a foot F.

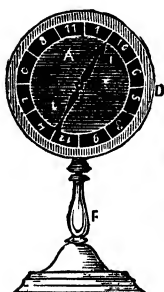


FIG. 176.

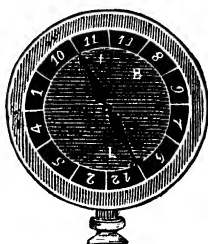


FIG. 177.

On each face, A and B, sink a circle in the centre, in which can be set two circles of pasteboard, six or seven inches in diameter, with a wooden rim or frame, D and D; divide these circles into sixteen equal parts, after having drawn two concentric circles; and indicate in

each division one of the thirty-two cards of a picquet pack, to wit, the ace, king, queen, knave, ten, nine, eight, and seven of each suit, in any order you please, provided that there are sixteen one side of one dial and the same the other, and the divisions of both sides corresponding.

Run through the two circles an axle, *GH*, in the centre of which mount a thin magnetic bar, *IL*; each of the two ends, *G* and *H*, ending in a pivot. Each pivot having a small head, like a pin, in order to stop the needle and prevent it falling off when it is made to turn. Screw on a small brass wheel at the place where the axle comes through the pasteboard circles, so as to turn the magnetized bar inside, by means of the wheels, to any point you wish. This axle must not move too freely, as it must not be able to shake loose when once it has settled. Set a magnetic needle of the proper length



FIG. 178.

exactly balanced, on the pivot, so that it will take precisely the direction of the magnetic bar, *IL*. (Fig. 177).

Set the inside bar so that its south pole points towards the two pasteboard circles in such a way, that on turning the needle to any part of the dial it has only to be released to come back every time to point to the two of the cards there written down.

*Performance.*—You skillfully induce two persons to draw out of a whole pack the two cards at which the needle points, according to the way the magnetic bar directs it, and at once presenting the dial to one of

them, you ask if the drawn card is at one or the other of its faces; next, the needle is set on its pivot and spun round, you remarking during its revolution that it will stop of its own accord at the chosen card. You repeat this operation with the selector of the second card.

*Note.*—By having another and similar needle, but magnetized in the opposite sense, so as to point to the south with what ought to be its north pole, you can draw four different cards, by following up the previous feat with a change of 'needles, to tell which were the additional two cards. To force the other two persons to take the cards you desire them, see that portion of this work treating of card tricks.

### Variation, with Numbers or Letters.

Instead of writing names of cards on the two faces of the dial-plate, you can divide them into twenty-four equal spaces, and in each put a figure or a letter of the alphabet, using I for J, and V for U, to save the two extra letters of the twenty-six.

Arrange the figures regularly from 1 to 12, in the order shown in the following table.

ORDER OF THE NUMBERS.

On the 1st face, A.	On the 2nd face, B.	Sum of the two opposite num- bers on each face.	Numbers diame- trically opposite.
1	11	12	
10	10	... ..	2
6	1	7	
5	4	9	
3	5	8	
9	2	11	
12	12	... ..	12
4	6	10	
7	7	... ..	7
9	9	... ..	9
8	8	... ..	8
11	11	... ..	11

By this arrangement, the addition of any one of the numbers 1, 2, 3, 4, 5, 6 on one of the faces A and B, to the number on the other face directly opposite it forms a number like that diametrically opposite it. Consequently, if, having two magnetic needles, one of which has its north pole at its point, and the other the south pole at its point, and making one of these needles turn successively on both faces of the dial, the sum of the two numbers it points out will make the same as that which the other needle will indicate on only one or the other of the faces.

The transposition of the numbers of this table on the faces is made by transcribing in the order of dial A, from right to left, and of dial B, from left to right, as in the illustrations. Only thus will the numbers be correctly placed. This circular row of numbers can be placed on the same circle as the cards in the previous trick.

*Performance.*—Into a box or bag with several divisions, put the numbers, written on small square cards, the numbers 1 to 12 in one of the compartments, and in another numbers like that pointed at on the face by the magnetic bar. You draw different numbers out of the bag or box, and after showing them, return them. Presenting to a person the division of your box or bag in which are the many similar numbers, you beg him to take one out at random, and hide it in his closed hand. Then, you offer to make the needle tell him what is the number, either in one time or two, which you can do by using one or the other of the needles. If it is to be pointed out at once, you can give him the choice of one of the dial-plates.

*Note.*—The box or bag with the numbers being in several compartments, the recreation can be varied still more by putting in a third division other similar numbers, so that two different numbers drawn could be pointed out on the two faces of the dials.



## The Enchanted Well.

Form a miniature well of cardboard, A, mounted on a step, or square block, B, c.

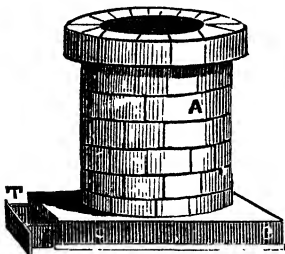


FIG. 179.

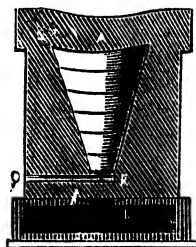


FIG. 180.

The dimensions are two inches high by one inch wide; the mouth of the well three-quarters of an inch. The base is hollow, for the reception of a drawer, r. The opening tapers down conically, so as to be but a quarter of an inch at the bottom. (See the profile of the figure beside it.)

Above the base, at the place marked *i*, a little below the bottom, *a*, of the well, place a small convex mirror, *H*, of such spherical proportions, that should any person look down into the well from a distance of a yard or forty inches, the head and bust will appear only about the size of the diameter of the bottom of the well,

At the point *i*, on the base, mount a magnetic needle, *R Q*, on a pivot, closed in by a very thin sheet of cardboard, *o s*, cut in a circle five inches and a half in dia-

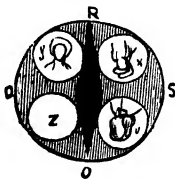


FIG. 181.

meter. Divide this circle into four equal parts, as in Fig. 181, and draw on it four small rings, in three of

which you will paint the heads v, x, and y, each with a different head-dress; one, for instance, being a hat, one a turban, one a full-bottomed wig, observing that the place where the face should be is cut clean out, and the fourth ring, z, cut entirely out, as shown in Fig. 181. The needle, k q, must be placed as the figure represents it.

Take four tablets, square, and of the size to go neatly into the drawer t, and on three of them paint similar heads to those painted on the circle (Fig. 181).



FIG. 182.



FIG. 183.



FIG. 184.



FIG. 185.

Behind each of the four tablets set a magnetic bar, arranged with regard to its poles, as in the Fig. v, x, y, and z, covering them with cardboard, to prevent any one seeing the bars.

*Note.*—The feat can be made still more extraordinary by forming the lining of the well of tin, and putting a piece of clear glass at the place g, near the bottom, fastened in with gum, so that no water can soak through, upon the apparatus beneath.

*Operation.*—When any one of the three tablets, v, x, or y, is placed in the draw under the well, the magnetic bar, then shut up with it, will then turn and fix the cardboard circle, which is moveable, in such a way that the head-dress, similar to that painted on this tablet or picture, will present itself at the opening in the bottom of the well. Therefore, if a person holds his head above it at the suitable distance, the convex mirror will reflect

his face in miniature, and also give him the appearance of wearing the head-dress painted on that part of the cardboard below.

*Performance.*—You put the apparatus on the table, with a short series of remarks, in which you will certainly not forget to introduce the proverb of “truth in the well.”

If picture z is put in the drawer, the place of the opening in the moveable circle, which is clear, being downwards in the well, the looker-on will see in the mirror his face and hair naturally. Beforehand, the picture z being placed in the drawer, there being nothing painted on it, so there will be no alteration. Several persons are asked to look in, remarking that they shall only see themselves as they are. Take this picture out of the drawer, and put the three others into the hands of one of the party, bidding him select one, and, according to the figure in which he desires to see his portrait, place that tablet in the drawer. You close it, making some mysterious wayings with your wand, and the instant afterwards, begging the person to look into the well, he will see his face adorned with the head-dress which was pictured on the tablet.

*Observation.*—Well done, this piece of recreation produces quite an agreeable effect; but it is essential that the mouth of the well should be of good size, and the well itself shallow, in order that the inside should be lighted. The person who looks in must be in the proper position. Besides, the well must be separable from the base, in order that you shall be able to adjust and change the cardboard circle and make use of a great number of tablets.

If the apparatus is constructed on a larger scale, which will be better, there can be placed on the same circle a still greater number of figures or faces, by suitably arranging the magnetic bars.

### The Enchanted Head

Have a cardboard head cut out and painted, life size, a little leaning, so that the eyes will not be horizontally

placed. Cut clear out the eye-sockets; put in very thin glass, concave on one side, convex outside; painting the concave side white, except the iris, which you leave clear, and the pupil painted black.

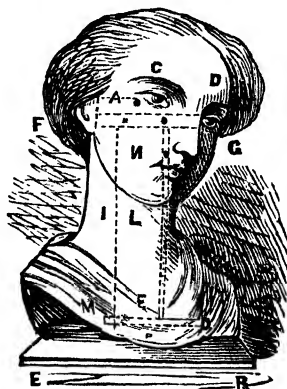


FIG. 186.

On a pivot, *E N*, place horizontally and well balanced, a cylindrical zone of thin cardboard, *F G*, on which are painted different colours of eyes, such as black, blue, greenish, grey, in such a manner that none of the colours appear in connection abruptly, but are joined by gradual shades; observe also, that the same shade should commence at an equal distance to that between the eyes themselves, and follow on the part *A*, that which is to appear under the eye, *C*, and on *B*, that which ought to appear under the eye, *D*. It is easy to see by the figure that what is painted on the upper part of the zone appears through the eye *B*, and what is on the lower part through *B*.

By means of the two brass wires, *I* and *L*, suspend a magnetic bar, *M O*, five or six inches long, pierced in the centre with the hole, *P*, large enough not to rub against the pivot, *E N*, and placed as near as possible to the foot, *E R*, or thin board, as it is, on which the head should be placed. Having set the head on a table, into which has



been inserted a magnetic bar, about eight inches long, A B (*see* Fig. 187), moving on an axle in its centre, and



FIG. 187.

turned by any concealed means you please, the bar, M O, which carries the zone with it, will always be in the same position as the one hidden, which we here suppose is put in motion by your confederate.

This head being placed in full view, it is announced that the eyes have the chameleon gift of taking the hue of those that look at them, and that the same colour will remain until another person stands before it, when it will fade away gradually, to assume the tint of the eyes of the new comer.

Supposing that the first person who comes forward has light-blue eyes, you add to what you have previously stated,—

“Here is a lady [or gentleman] who has light-blue eyes; and you will see the eyes of the head assume that same hue.”

On hearing this, your concealed agent will turn the bar hidden in the table, which will move with it that placed in the base of the head, and the cylindrical zone, until it is seen that the eyes of the head are the same in colour as those of the person.

*Observation.*—As the magnetic bar in the head turns of itself to the north, the head being held at a certain angle to the north, would itself give its eyes the colour called for; but the movement of the zone would then be apparent, and would not stop sharply enough for the cause of the amusement to be sufficiently unsuspected.



### The Magnetic Card Box.

Have a box made with a lid working on hinges, A, B, C, D, about six inches by eight; and the depth eight or ten inches.

Measure off a third of the length from *r* to *κ*, and place there, *ε*, a pivot on which you set the cardboard circle, *c*, three or four inches in diameter, closing in a

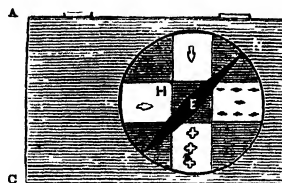


FIG. 188.

magnetic needle, *κ s*. Draw on the circle four playing-cards, arranged as in Fig. 188.

Cover the box with a glass, on which, in glueing on a sheet of paper, you leave an opening, *h*, through which one or the other of the cards on the circle can be seen.

Have a small portfolio, *A B*, of the same size as the box with a flat back and after having marked off its length in three equal parts insert in one of its sides two thin magnetized bars about three and a half inches long, so that half the circuit of one, *κ*, overlaps that of the other division, *r*, the north of one pointing to the



FIG. 189.

angle *κ*, and that of the other to *c*. This portfolio may be placed under the box in four different situations, either by changing the position of one of its sides under the box, or by moving the box itself, likewise altering the direction of the bar under the circle, *c*, making one of the cards on the cardboard circle, *c*, show itself by the opening, *h*, whence it follows, that you can thus make any of them appear at desire.

*Performance.*—Force two cards from a pack on two different persons, like those on the cardboard circle. Then, handing the portfolio to the first person, beg him to shut up his card in it and give it back to you; place it then under the box, in that situation which will make its counterpart card on the circle appear in the box under the opening, H; immediately afterwards, open the box and show the card which was drawn. Do the same with the second card.

*Observation.*—As you may have failed to force the cards you wished, you must not proclaim that they will infallibly be told by the box until they were really drawn by the company, by which means you will not be embarrassed, but can, instead of this recreation, perform some of the card tricks explained previously under the proper head.



### Cupid's Palace.

On a wooden base, A, B, C, D, E, F, in the shape of a flight of steps, and of hexagonal form, very thin in

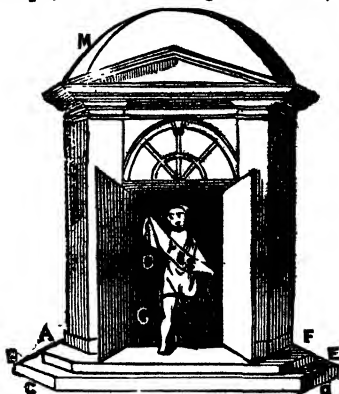


FIG. 190.

the middle, G. On this stand a little house, temple, or cottage, of any shape you please within. The whole is to be planned so that any one looking into the interior by the door, G, cannot see the floor, A, B, C, D, E, F. Observe

that it is necessary for the board forming the floor of the building to turn with the circular centre-piece of the bottom, A, B, C, D, E, F, and to be far enough above it—say a quarter of an inch—to let the centre-piece, with its magnetic needle, N S, on a pivot at H, turn freely.

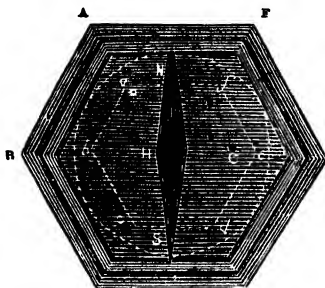


FIG. 191.

On the rim of the centre-piece, at equal distances from the centre H, stand six small figures, cut out of card, very light, and painted so as to exactly resemble one another; they represent a cupid, gipsy, fortune-teller, wizard, or sybil, holding a small scroll, on which is written one of such words applicable as answers to many questions, as "yes," "no," "love," "faithfulness," "constancy," "cruelty."

—□—

### The Magnetic Table for Cupid's Palace.

On a table, A, B, C, D, with a double top, and the upper slab rather thin, fix a magnetic bar. The bar, N, S, is of the same size as the illustration shows in proportion; traversed by an axle, on which it moves easily and noiselessly.

Upon this axle fix a pulley-sheave, E, two inches and a third in diameter, on which is an endless cord, F, which also runs round a second pulley-sheave, G, of the same size, placed over one of the legs, I, of the table; this leg, like the others, is turned, and a moveable moulding, H, turns in its circular movement the pulley-sheave, E, this is done by forming the leg of two diffe-



know the position given to the bar, and consequently to the thin magnetised bar hidden in the *Palace* set above it, which must take the same direction.

On a number of blank cards are written questions, to which the words on the scrolls will befittingly answer; and they are arranged beforehand; so that after a pretended or real shuffling, the performer knows what answer to give to any card presented and chosen, making the bar hidden in the table act as secretly as possible, you direct it so that each of the little figures who hold the answers to each of the selected cards will appear at the door according to your needs. You must take care not to open the little door until a moment after the bar has settled in its place, in order that the figure should have ceased to vibrate, thus avoiding any suspicion that there are *several* figures which come round to the door, instead of apparently the one same figure who gives the different answers, which constitutes the marvellous part of the recreation. To make sure that the figure at the door has become quiet, a little opening made on the side opposite the door will enable you to perceive that figure which is diametrically opposite the one at the door, and you can tell by that one in what state is its counterpart.



### The Ringing Bells.

Let a small round tin box be made, with the cover and sides pierced with holes. At the bottom of the box



FIG. 194.



FIG. 195.

fix a small magnetic needle, *N, S*, turning freely on a pivot, and furnished with a watch-spring; place within the box a small bell, such as are in repeating watches, against which one end of the bar can strike; place this

box on the magnetic table previously described, in such a position that one end of the bar enclosed in the table will be under the box at about the point D.

*Operation.*—If you move the magnetic bar in the table from F to G, it will attract the small bar in the box, so that it will turn and strike the bell as many times as you please to let the bar return from G to F, and make it go from F to G again.



### Amusement with the Magnetic Bell.

Just as the table-rappers rap out the letters of the alphabet by as many knocks to each as signifies its numerical position, as 1 for A, 2 for B, and so on, so you can spell out persons' names, &c., by this bell.

Or, having written on 24 blank cards the numbers from 1 to 24, arrange them in the following order:—

#### ORDER OF THE CARDS.

Card	No.	Card	No.
I. ... ..	11	XIII.	5
II. ... ..	12	XIV.	6
III. ... ..	9	XV.	19
IV. ... ..	10	XVI.	20
V. ... ..	13	XVII.	21
VI. ... ..	14	XVIII.	
VII. ... ..	15	XIX. ... ..	4
VIII. ... ..	7	XX. ... ..	22
IX. ... ..	8	XXI. ... ..	23
X. ... ..	16	XXII. ... ..	24
XI. ... ..	17	XXIII. ... ..	1
XII. ... ..	18	XXIV. ... ..	2

The cards being thus arranged, let the party see that they are to all appearance mixed up higgledy-piggledy, and false shuffle them, as explained in the Card Tricks, in order that they shall come out in the natural order of the numbers, 1 to 24. Put the pack on the table face down, and let one card be drawn at hazard; notice at what place the selected card was in the pack, as that will tell the number written on the drawn card, of course, and state that your magic bell will ring out as many strokes as there are units in the figure on

the card. By working the bar properly, as explained above, you will redeem your promise.

*Variation.*—Let two cards be selected instead of one, and state that you will similarly tell the amount of the two numbers, or the difference between them. And if, in letting two cards be drawn, you perceive that one of them is divisible by the other, announce that the magic bell will tell how many times one number is greater than the other.

Some of the other amusements in this book can be performed with this bell; but the reader's own wit will apply them properly.



### The Magnetic Clock; or, the Time of Day told by a Lizard running round the Rim of a Clock-face.

*Construction.*—Get the works of an old-fashioned watch, of large size (or an ordinary clock movement, without the minute-wheel, and with the axis that turns the hour-hand in a vertical position), and fasten on the

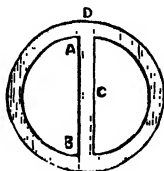


FIG. 196.

pin of the hands a small strip of brass, A B, pierced at c with a hole, in which is set a socket and cap to fit the top of the axle.

This strip of brass holds a rim of magnetized steel, D, six inches in diameter, all to turn horizontally within a zone or circle of very thin glass (cut with a diamond a section of a thin glass bottle), a little over an inch high; the poles of this magnet are to go up as close to the glass as possible, without actually touching it.

On the inside of the glass paste a circle of paper, on which you have drawn the twelve hours of the day; place the whole in a hollow stand of wood, nicely turned



and painted, as in the illustration, where the zone enters between the top, c, and the base, d. (Fig. 197).

This having been done, make and cut out a miniature

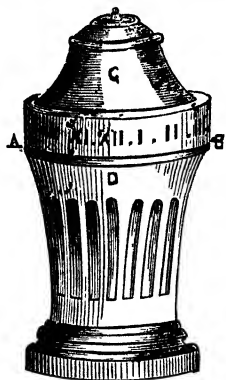


FIG. 197.

lizard of thin steel plate, or such other animal as fancy may suggest, a little less than an inch long, and as light as possible; curve it so as to fit closely outside the zone of glass, and magnetize it, so that on its being put on the outside of this circular dial-plate, and towards the poles of the concealed steel within it, the figure will stand still, with its head in the direction to which the circle moves.

When the clockwork is wound up, the wheel will be twelve hours making the complete circuit of the inside of the zone, and the little lizard, always being fixed on the poles of the wheel, will also go round, telling the time as exactly as a hand, which will appear all the more marvellous from the fact that you can take it clear off and put him back again, to show that it has no connection with the clock itself.

**To make Little Figures which will sometimes Pursue and sometimes Avoid each other.**

Have two pedestals turned, round and hollow, three inches in diameter, with a hole through the centre of

the upper part, *A*, a sixth of an inch wide, and free to open.

In the bottom of each pedestal place a strip of mag-

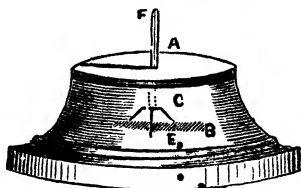


FIG. 198.

netized steel, a third of an inch broad by one-twelfth thick, and two and a half inches long. Bore a hole in it, in the middle, and there fix a bent blade of brass, *c*, on which you fasten a *scapement* (in watchmaking terms), which being above this brass blade, will prevent it being unsteady when it is set on the pivot, *e*. Let a brass wire, *f*, enter the upper part of the scapement and protrude about an inch out of the hole you made in the cover, *A*.

Out of some light material mould two figures, four or five inches high, representing, for instance, a school-master and a pupil, which you will fasten to the brass wires, one to each, in such a way that they will face the northern poles of each of the magnetized blades with which they turn.

*Performance* —When you present the scholar to his master, by holding the pedestal and preventing it from moving with the finger, the two northern poles of the magnets—if all has been done as directed—are then facing each other. That of the scholar will compel that of the master to turn his back (towards which is pointed the southern pole), and the master will seem to run away from the pupil; if you take the other pedestal, and bring it to the scholar, he will fly from the master, which will be highly diverting.

Among the subjects for this scene will be a general and a soldier, a sportsman and a lion, or bear, two ships, a cat and a dog, &c., &c.

### Tricks with the Magic Lantern.

The magic lantern is a dioptrical instrument, invented by Father Kircher, with the property of making figures painted on pieces of thin glass, with transparent colours, appear of large size on a white surface, as a wall or sheet. Behind the glass picture is a strong light, and before it two magnifying glasses or lenses in a telescopic slide, so that they can be adjusted in focus, and so send the rays of light from behind the glass diverging to the wall, where they will form a larger image.

If the light is from the sun, the effects are akin to those of the solar microscope; if by a candle, or lamp of any sort, a reflector is set so as to save all the rays that would not otherwise have illumined the picture-glass.

To give movements to the figures in the picture, two pieces of glass are used, one set in a frame and painted with part of the figure, while the other, bearing the moving portion (as a leg, an arm, or machinery), is worked by a string or a rod, sliding in through a slit in the frame: thus can a wind or water-mill be seen in action; a cobbler sew at a boot; a comic man drink; a Chesterfield take off and put on his hat; Mr. Punch flourish his staff of office, &c.

To make this optical apparatus more amusing and wondrous, prepare the figures so as to be able to give them natural movements, done by using two glass *slides*, on which different parts of the same object are painted, and moving one to and fro behind the other. Thus Jack can be made to thrust his sword at a giant; Jack, Jill, and the pail fall downhill; a grotesque head put out its tongue; a smith hammer on an anvil; a rope-dancer waltz from one end of a cord to the other; a trapezist perform, &c.

A *dissolving view* is managed by two lanterns of the same powers, lighted equally. The light from one must fall on the same point of the screen where the other casts its picture, so that when one slide is gradually shut off, and the other proportionately discovered, one scene seems to fade into another. The best effects are a landscape in winter becoming a view in summer; a

desert into a populous market-place; a ghost into a jolly laughing man, &c.

For *phantasmagoria*, the figures are surrounded by an opaque tint, so that the rays of light pass only through the figures themselves, and while the magic lantern views are cast upon a wall with a halo or circle of light all around them, the phantasmagorial lantern throws them on a transparent screen, such as a sheet of wetted or waxed muslin; oiled or tissue paper, strained smoothly on a frame.

To prevent the friction of moving slides injuring the painting, interpose a thick band of paper around the edges, to keep the surfaces of the two glasses from contact.

### The Witch of Endor Trick.

The light of the magic lantern, as well as the colours of the objects designed on the slides, can not only appear on a sheet, but can as well be given an abiding-place on smoke.

For this purpose, make a pasteboard or wooden box, four feet high, and seven or eight inches square at the base, tapering upwards, so as to end at top in a slit six inches long by half an inch wide. At the base of the box is a door, closing tightly, through which can be put a chafing-dish. If incense is put on this, the smoke will issue in a sheet from the opening above. On this column of vapour the light of the lantern is directed, using the ordinary slides, it being extraordinary that the rising of the smoke has no effect on the shape of the figures, which seem tangible enough to be readily grasped in one's hand. The light must be reduced to its smallest focus, to have the outlines clear.

By this means, a ghost may be made to rise up on a pedestal, set in the middle of a table, the illusion being best if the cause is not known. For this trick, shut up a small-sized lantern in a box large enough to hold a moveable mirror, inclined so as to reflect the cone of light from the magic lantern placed opposite it. The part of the box over the lantern-chimney must be pierced with holes to let out its smoke, and on this spot

set an oblong chafing-dish, just large enough to hold a few live coals.' The opening made in the box to let the reflection from the mirror pass out, should be hidden as far as can be from the audience. The slide is put in vertical motion by a thread, which works on two pulley-blocks, coming out at one of the corners of the box, so that it can be let down and drawn up. Let there be painted on the glass a comic demon or hobgoblin, or any other figure more to your fancy, designing it somewhat squat and flattened, because the column of smoke does not cut the cone of light from the lantern at right angles, and therefore the figure would appear lengthened out of the proportions you desire.

*Performance*—After having lighted the lamp of the lantern, and set the mirror properly, bring in a well-closed pedestal and set it on the table. Entreat the audience to be under no alarm. Place the chafing-dish as stated, and sprinkle some perfume-powder on the coals, instantly lifting the trap and gently let down the slide. When you notice that the smoke is ceasing to rise, lift the slide and shut the trap. All other lights must be out in the room, and the pedestal must be placed so high that the audience cannot see the opening by which issue the rays of light. Done so that the apparition will be life-size, the effect will be profound. There may also be employed for this apparatus, slides depicting flowers, cards, and other things, which, by various processes, you have made away with, and having burnt which, you pretend to throw the ashes on the chafing-dish.

### Secrets of Hydraulics.

*The properties of water, considered with respect to the following diversions.*

Water is a fluid body, of which all the parts are in continual agitation, and yield, without any great resistance, to efforts made to separate them. Wine and water, for instance, are liquids of about the same gravity, and they mingle with so much speed, that in a second the water seems to have turned into wine.

If there be plunged into water any body, which of

a certain size is lighter than as much water as could be held in a case of that size, such as cork, some woods, &c., they will float; if of the same weight, they will swim on the surface, or just under; if heavier, they will sink. Light substances swim because water, being heavier, cannot go down under them unless they could force it so to do, and the laws of motion forbid a weaker force compelling a stronger. Those of the same weight remain in the water just where placed, because neither can give way, by the equality of their powers. The heavier sinks because, since it cannot merge into the water, it must force it upwards to take the place of the void it thus formed; a superior force, free to act, must overpower a weaker one.

A solid body plunged into water or another liquid, and held up by it, weighs less in respect to the sustaining substance: supposing its weight in the air to be six pounds, four pounds of power in the water will sustain it, if an equal volume of water weighs two, as the water upholds the equivalent to the two pounds difference.

Water has the property of being rarefied extraordinarily, heat dividing it into an endless number of minute particles; the heat of the sun, for instance, drawing up an immense quantity of aqueous particles from the oceans, seas, and rivers, which form clouds, and, by their union, occasion rains. Cold condenses it into ice. It cannot be compressed like air, and hence has no spring or elasticity to it.

With the facts here given, the following diversions will be understood, we having only to add that water will rise vertically from a pipe held perpendicularly to the horizon, and in a curve, if the pipe is inclined to the horizon.



### **To make Hydraulic Machines with Pleasant Effects.**

Though the art of embellishing gardens with various water-works is mostly restricted to cascades and fountains, nature being inexhaustible in the shapes it can give to bodies, there is consequently a variety of means to produce novel effects, and so augment our pleasure

in such contrivances. Those here described will cost but a trifle to apply to such water pipes as you have down, since one of these set pieces of tubing can be screwed on to any fountain-pipe. In miniature, such machines are pretty for greenhouses, hall windows, aquaria, and studies, and only require a small reservoir on a slight elevation.

### The Hydraulic Globe.

Have a hollow cone, ~~as~~ made in brass or lead, of a size proportioned to the quantity of water issuing from the pipe on which you set the machine. Let it be rather thick, and pierced with small holes, bored in the direction of the rays of the cone. If the pipe on which this

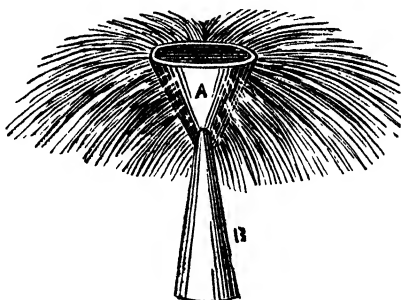


FIG. 199.

is set is an inch wide, the whole of the holes must let out no more water than the pipe would, and the less the better.

To this fit the pipe B of any length you think proper, soldered in level with the supply-pipe.

The water will fill the cone, and, spirting out of the small holes, will keep on in the various directions given the threads, and so form a globe of water most pleasant to view.

### The Hydraulic Fan or Vase.

Have a hollow cone of lead made, with its axis one third of the diameter of the base. The circle of its base to be clearly open, so that when supplied by the feed-pipe, the water will escape freely and equally on all sides. On this cone fix the pipe which serves as a support to the base and top of the cone, but also pierced with many holes in that part of itself which is closed in, so that the water can freely escape in sufficient quantity. Screw this pipe into the end of the supply pipe. The water, rushing swiftly inside the cone, will rush out by the top opening and form a sheet of water of the shape

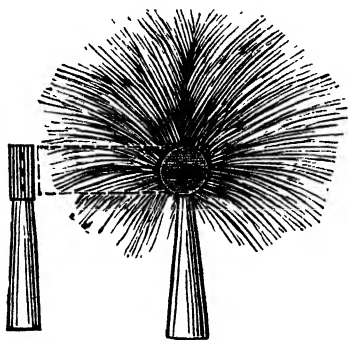


FIG. 200.

of an Indian fan, a peacock's tail, or buckler, as you please to fancy the resemblance. By stopping up some of the holes, you will be enabled to represent other devices, such as the Prince of Wales's feathers, &c.

*Observation.*—If the machine has been made suitably, the reversing it will make it form a sheet of water of the shape of an urn or vase.

If you have a strong enough head of water, you may fix different pieces of such devices on the same pipe, and with the globe previously described above them all, the effect will be handsome. Variations can be had by making the base of the cone in the present device broader in relation to its height.



### The Hydraulic Sun.

Have the sections of a hollow globe made very flat, and fasten them together so that there will be a very narrow circular space between them, on this fasten a pipe which will supply water to the inside of them, they being vertically elevated on it. This pipe at the other end screws into the end of the fountain-pipe.

This will form a sun in water, particularly if it has been made so that the water can flow in profusely and rapidly escape.

*Variation.*—Several such can be mounted horizontally on the same pipe running through them, the one under the other to be less in diameter than the upper ones. The upper ones should also diminish in size.

### A Turning Sun in Water.

Have a hollow ring or wheel made in brass, rather thick at the rim, where you bore a dozen or so of inclined holes, or set an equal number of small tubes. Fix it on a pipe which will fill it, and on which it can freely turn. When the water rushes swiftly towards the slanting holes made in the circle, or out by the small pipes fixed in them, the effort it makes to escape will cause

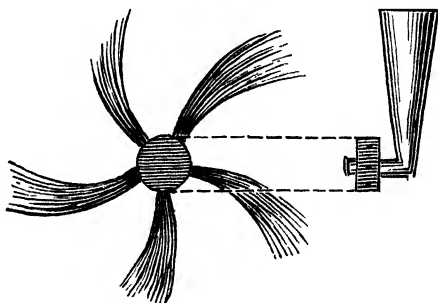


FIG. 201.

the circle to turn round, and produce a different effect from that of which a description has been given.

### Secrets of Electricity.

Granting that the marvels of electricity have occupied the minds of eminent men of science, it is also true that they have been for a large number of other persons objects of entertainment, as curious as pleasant and instructive. The astonishing spectacle of such phenomena could not fail to excite in the latter as great a yearning to learn the effects as the former felt to penetrate the causes. Be that as it may, no one can dispute, that while this interesting part of physics owes much to the profound researches and manifold experiments of the purely learned, those who have only sought to entertain themselves have contributed to the discovery of many effects which have guided the academicians to enter into the mysteries which had been previously supposed to pass beyond their speculations.

We present some recreations which require no course of training, and can be worked with a simple electrical machine, which can be purchased at a reasonable price anywhere, and is known to everybody.

We find it well, however, to give the definition of terms connected with electricity and its experiments.

*To electrify positively*, means to accumulate on a body a greater quantity of electricity than was naturally in it.

*To electrify negatively*, means to subtract from a body some of the electricity naturally in it.

*To insulate a body*, is to place it so that it has no communication with any other body but those which are electrified by itself, and this is done by suspending it by silk cords, or placing it on a glass plate, or a stool with glass legs, or on a cake of resin.

*To draw sparks*, means to put some non-electric body—as your finger—near an electrified body, either by making the superfluous fluid run off into your body by simple contact, or by exciting the shock, as in the *Leyden Experiment*.\*

\* A learned physician of Leyden, eager to learn if water could receive and transmit electricity, filled a large jar with water, thrust into it a brass wire suspended from the conductor of his electrical machine, electrified it, and—whilst he touched the outside of the jar

*To receive the shock* is to practice on one's self the Leyden experiment, by touching the jar with the one hand, and the conductor or the knob of the jar with the other.

*The plate* is a glass disc, which turns on an axle at its centre and, by its friction against cushions or buffers, collects the electric fluid, otherwise diffused in the glass and its communicating bodies.

*The conductors* \* are brass, tin, or gilded pasteboard cylinders, employed to receive and transmit the electricity collected by the plate.

*The chain* is a conductor peculiarly adapted to more easily transmit electricity to persons or other bodies to be electrified.

*The discharger*, or discharging-rod, is a semicircle of thick brass wire, ending each way in a brass ball, and fastened at the centre to a glass handle; it is used for experiments akin to that of Leyden, and protects the operator from receiving the shock in any degree.

*The electrical stool* is a board or stool large enough for a person to stand on, with three or four legs of glass, which isolate any body placed on it which you wish to surcharge with the fluid.

*A battery* is a number of bottles or jars lined and coated with metal, as with tin-foil, for instance, with which—they being properly connected, so as really to form but one container in their united several selves—the effects of the Leyden experiment are considerably heightened.

*The points* are small luminous arrowheads, to give an idea of their shape, with either convergent or divergent rays, perceived in darkness at that point of a body whence escapes, or which receives, the electric fluid.

with one hand (or, as is more likely, some non-electrical body near him),—he held out a finger of the other hand towards the same conductor; but he was instantly so sharply and violently shocked in both arms and the chest (quite unexpected by him), that he was alarmed, and protested that he would not receive such an emotion again to be King of Holland. This discovery is known as the Leyden Experiment.

\* All non-electrical bodies are reputed *conductors*, and the most perfect are metals, water, and animals. Those bodies not electrical in themselves, are called *non-conductors*.

*To charge a jar* is to fill it more or less with electricity.

*To discharge it* is to pass a quantity of the contents from within to the exterior.

### To Succeed in Electrical Experiments.

For all electrical operations for which an abundance of the fluid is required, dry weather, particularly during a hard frost, is most favourable. The clerk of the elements not being propitious, you can do without his kindness by having a good fire blazing in your room of performance, and warming and drying the cushions and machine itself. The amalgam can be enhanced in power by a mixture with Spanish white or cinnabar. This amalgam often leaves black spots, which in time spread, and as they would annul the effects, they must be carefully scratched off as they make their appearance. Sometimes a rather thick crust of it spreads on the cushions, but this improves them. Scratch the crust a little, and that will improve the quality of the electricity, and do away with the necessity of putting fresh amalgam on it.

As the electric fluid is supplied to the conductor by the cushions, they must also communicate with bodies that are good conductors, and especially with the floor, when it is not too dry, in order that they may draw from the common reservoir a still larger quantity of electricity, for transmission to the board. If a brass chain can be led from the cushions to the floor, the fluid will be more powerful.

The cushions should be oblong, and with the third of the plate's diameter; they must not press the glass too closely, as that may shiver the plate without any greater effect being gained. The plates are also subject to fly in pieces when they are not accurately rounded.

When a jar is being charged, and its knob is only a little way from the conductor, and no more sparks enter it, it is then full to the point of having no room for more.

To prevent any loss of the fluid furnished by the

plate to the conductor, the machine must have no angular parts in its materials to attract it, and the conductor none to emit it. All bodies electric by communication with sharp points or angularities must be kept a yard or so off.

All other things being equal, the larger the plate of the machine, the stronger and longer the sparks, as its surface exposed to the atmosphere is then the greater. Nevertheless, the shock sent out from a small machine is much more sharp and more clearly felt than those from plates of a larger diameter.

Supposing that two jars of different sizes had been separately charged to their utmost capacity, the explosion would be strongest from that jar with the most surface; but if not charged full, the smaller jar would produce the most sensible explosion.

When jars are overcharged, they are apt to discharge themselves.

Electric batteries must not be used in unfavourable weather, as then they may not become charged at all, especially when composed of numerous small jars, for, in damp weather, the fact of one of the containers not being dry, will be enough to explain their losing much of the electricity furnished by the plate, which, under the same circumstances, will not collect the fluid freely.

When you discharge a jar, do not place the discharging-rod in a weak part of the jar, for the explosion may be strong enough to shatter the vessel. A cracked bottle cannot be charged, and one such in a battery may prevent every one of the rest from being filled.

When glass, for legs of stools, &c., is not at hand, wood, dried in an oven, may be used, the harder sorts being less electrical, generally speaking. But though these will answer for a time, damp will attack them gradually, and hence make them conductors. As much as you can, use sulphur, glass, or silk, the former being the best substance for insulating.

When you charge a jar, or, more particularly, a battery, take heed not to risk an explosion by some mischance, and never during the charging to touch the conductor of the machine, or whatever connects it with the battery, for the reason that the electric fluid may return by that

means to the outside of the jars of the battery, by a line, not thought of, in which current stands the imprudent experimentalist.

### The Electrical Fowler.

Paint a wooden or pasteboard doll, five or six inches high, representing a sportsman with a gun, and insert an iron wire to run from the feet up to the muzzle of the gun, stand it on a square pane of glass coated with metal, A, B, C, D. Electrify the upper face of the glass

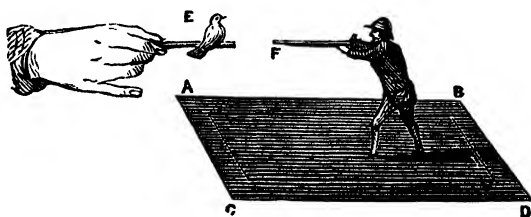


FIG. 202.

plate by communication with the conductor-chain. Make a bird, F, out of metal, and set it on a wire perch.

When the plate is charged, with the figure upon it, any one touching or communicating with its under face, and holding the bird in one hand, who presents the end of the perch to the muzzle of the gun, will discharge the plate, and the figure will seem to have fired the shot. If the plate is small, and has been strongly charged, the shock will be felt deeply, to the great surprise of the receiver.

Such a shock, and others, can be given to people unsuspectingly, by hiding under a carpet near the table an iron wire, secretly communicating from the plate to the floor, or with some part of the table, on which the person may be made to sit or lay his hand. If the foot is put down on the floor on the wire, the shock will be felt in the legs as well as the arms, but chiefly in the ankles. It requires no great amount of invention

to surprise your victim's with a shock, but they must be given but feebly to persons, to keep the act within the bounds of a harmless practical joke.

### **The Luminous Bouquet.**

Around a cylinder or circle of glass, six inches in diameter by five inches high, coat in tinfoil a band three inches broad, both inside and out, so that there will be an inch of clear glass above and below the band. Stop one side of the cylinder with a circle of thin cardboard, blackened with the shape of a flower, such as a rose, lily, &c., cut clean out of it; cover this aperture with fine paper, on which you paint the same flower in transparent colours; mount this cylinder on a stand vertically, without insulating it.

*Performance.*—If an iron wire connects the conductor of the electrical machine with the outer coating of the cylinder, so that you can charge it, and then you put one end of the discharging-rod against the outer coating and the other, so as to draw the spark out from the inside, light will flash over the circle vividly enough to illuminate the transparent flower or bouquet.

### **To Attract a Light Body Floating on Water:**

A bottle or tube, if electrified, has the property of attracting light bodies. Take a phial, five or six inches long, coat it outside up to an inch of its mouth with tinfoil (or let your hand grasping it be its cover, in default of the foil). Fill it three-quarters' full with water, and stopper it with metal, through which a thin brass wire runs down, so as to reach the water, put the phial in a case or jacket, which must not touch its sides or be too closely around the stopper; electrify the case by holding the stopper to the conductor of the electrical machine.

*Performance.*—Having thrown upon water in a dish any light substances which will float, such as bits of

cork, brown paper, &c., you bring the cork of the phial near it, and can attract the bodies so that they will let themselves be led to the edge of the vessel, just as a magnet attracts iron, which will appear very strange to all not aware of the phial so innocently taken out of your pocket having been electrified.

*Observation.*—The phial must be electrified only a little while before you make use of it, to prevent the electricity weakening by the loss of time.



### Luminous Rain or Hail.

*Preparation.*—Have a stand, A B, made of brass or wood, but with the plate, A, covered with metal, which should be five or six inches in diameter.

This plate should be set upon a rod, which goes down into the base, B, so that it can be lifted up or let down by means of the screw, F; cover the plate with a tube of glass, c, three inches high (which may be made by cutting a glass jar, or the top off a goblet). Have another brass plate, less in diameter than that of the plate B, so that it can freely enter within the tube c. Form a communication between this plate or cover and the conductor, by means of a thin chain; sprinkle on plate A a couple of pinches of brass filings, or very small clippings of the copper spangles used by theatrical costumiers. Place the stand on the table, and electrify the conductor.

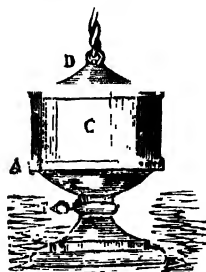


FIG. 203.

*Performance.*—The particles of metal placed on plate A are attracted to plate B, where they are electrified and repelled; falling on A, that absorbs their electricity, and they are again attracted and again repelled; and as at each such contact all the particles draw a spark from plate D, it looks as if the tube was full of a rain of fire. The full lustre will be when the weather is favourable,



and you perform in a dark room. The rain ceases the instant you stop electrifying the conductor.



### Electrical Dancers.

Have two plates made of the same form, as described in the previous trick, but not less than six inches in diameter.

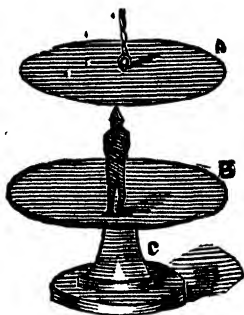


FIG. 204.

Cut out of thin paper several small figures, **about** two inches high, painted with transparent colours, shaped so that their heads, as well as feet, will end in a point.

Put the base, *c*, and the plate, *B*, it supports, on the table, and hang from the conductor the plate *A*, in such a way that it will be exactly above, and about four inches from, the lower plate, *B*. Electrify the conductor.

**FIG. 205.** The little figures will be, as in the previous trick, continually attracted and repelled between the two plates, as long as the electricity is collected by the conductor, which will form an electrical dance of the most enlivening description.

*Observation.*—For two figures to dance at the same time, the plates must be larger, and, instead of being round, they must be a long oval, to prevent the figures touching each other.

### The Luminous Fountain.

To a tin funnel fasten a handle, A, so as to suspend it from the conductor; and let the opening, B, by which the water flows, be so narrow as to let it fall only drop by drop. Electrify the conductor. Instead of the water falling drop by drop, it will form a continual jet, in the shape of a cone, point upward, and appear luminous in the dark, if strongly electrified.



If, instead of falling by drops, the aperture is large enough to let it flow in a stream into a dish of glass (or metal, if isolated on a glass or sulphur support), your finger can draw a spark from it precisely as from the conductor, or from the metal dish catching the water.

FIG. 206.

### To Draw Fire from a Person.

Make a stool or stand of one piece of board, A, sixteen inches long by fourteen wide, with four strong glass legs, B, C, D, E, ten inches high, glued and set into four pieces of turned wood, which should be firmly fastened to the board.

Let a person stand upon this stool, so that neither he nor his clothes in any degree touch any other object, or be even within reach of them. Give him a chain to hold in his hand, of which the other end runs to the conductor of the electric machine.

A person thus separated from other things becomes part of the conductor, and presents, of course, the same characteristics. Sharp sparks can be drawn from any part of him, when there is held to him the finger, a sword, a coin, or any other non-electrical body.

If the person thus insulated holds downwards in his hand a bundle of fine glass threads, or very thin brass wire, tied together at one end, all the loose ends will fly asunder on their being electrified, but will come together again when another person, not electrified, puts his finger near them. But the reverse effect to this will take place if it is the insulated person who holds out

his finger to the non-electrified person who grasps the wire broom.

If the insulated and strongly-electrified person is bareheaded, and his hair cut short and not oiled, the moment another person holds his hand, or, better still, a metal plate, six or eight inches above his head, his hair will be seen to bristle up, and if in the dark, shine with light.

*Observation.*—Be very careful not to draw the sparks from the eyes, or any such delicate parts of the face of the electrified person, and the latter must not touch a second party in a similar manner; the pain will quite spoil any hope of fun you might have had in the matter.



### To give a Shock to any one Opening a Door.

Having formed a line of communication along the floor, from the inside of the room to the landing without (or the next room, as the case may be), by sprinkling the intervening space with water, charge a Leyden jar, and, to prevent it losing its strength, place it on a non-conducting support.

The instant a person touches the knob or key to open the door, and you bring the knob of the charged jar up to the lock, the electric fluid will dart through the key-hole, having no other means of returning to the outside of the jar but through the hand, arm, body, and legs of the person to continue its course by the floor, and return, *via* your own limbs and body, to the outer coating of the jar. You will feel the shock as well as the victim, but the latter will be the more deeply affected, from his not having expected such a reception.

•

### The Electric Spider.

*Construction*—You require a jar or bottle, coated inside and out with tinfoil, as in the illustration.

Into this, through its cork, you insert a brass wire, A, fastened by resinous wax, which ends on the other side in a small copper ball, B. Fasten a second brass wire,

with an elbow bend, c, similarly ending in a copper ball, d, outside the jar, so that it will communicate with

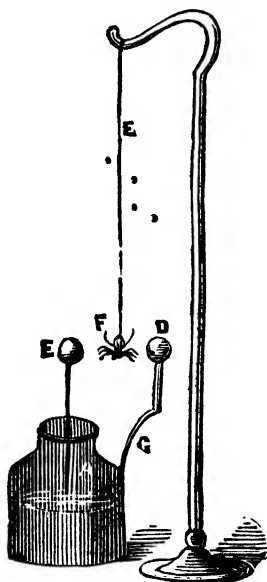


FIG. 207.

the exterior coating ; and place the two balls, B and D, facing one another, three or four inches apart.

Cut a piece of burnt cork, the size of a pea, into the shape of the body and head of a spider : make the legs of linen thread, or very fine brass wire ; glue a small lead shot to the body to steady it, and hang it by a silk thread, E, so that it shall be between the centres of the two balls, B and D. Charge the jar inwardly.

Having thus suspended the spider between the two jars, B being most electrified, and D less so, it will be alternately attracted and repelled, until it shall have drawn to the outside of the jar the electric fluid within it : this action will make it work its claws like a live spider, to the surprise of the uninitiated. A variation, is to place the spider between a jar electrified in the usual

manner, and another, set on a glass stand, electrified negatively.



### To Draw Fire from Water in a Glass Jar.

Fill a glass vase or jar, A, two-thirds full. Put into another vase of metal, B, sufficient water to make the water contained in both A and B, when A is plunged into the latter, stand at the same height. Into the water of A, drop the end of the conductor chain. Take care that A is not wet in the part above the water, or a communication between the two surfaces will be established.

When the conductor is electrified, and the inside of A

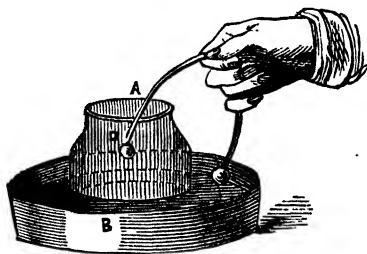


FIG. 208.

thereby charged, plunge into the dish, B, the end, c, of the discharging-rod, c D, and next bring the other end, D, to the surface of the water in A.

The jar, A, will be discharged with a sharp spark, which will dart out of the water itself; and if, instead of plunging the discharger into the water in B, you put your finger in it, and draw the spark with the other forefinger, you will receive the shock.



### The Electrophoros.

This title is given to an electrical contrivance for the execution of some of the experiments made with an ordinary electrical machine. It simply consists of a circular board, coated with wax and resin. It is made by joining several blocks of oak, and encircling them with

an iron or brass tire or band, which overlaps the edge slightly, so as to retain a melted composition of resinous wax and Burgundy pitch: shellac and the resinous wax of which sealing-wax is made is better, but is too costly when the disc is of a large size. See that the surface of the board is true and flat.

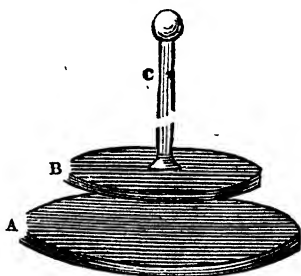


FIG. 209.

A second board, B, is made, smaller than the electrophoros, with rounded edges, coated with tinfoil, with a level surface; so that when brought down upon the larger disc, it would touch it in every point, which is the main feature of the apparatus. To isolate it, it hangs by three silk cords, or a glass rod, c. The larger these boards are, the stronger the electric spark.

*Performance.*—To obtain the electricity, shake over the board the tail of a cat or rabbit many times, being sure that it is quite dry. After this, if the circle, B, is held over the board by its glass or silk handles, and, after having touched B with your finger, you raise B, and put the finger near it again, a spark will shoot from it of a size proportionable to the dimensions of the instrument. To prove this, try with a smaller circle on the same electrophoros, and the spark will be seen to be much less strong. You can repeat this feat many times before the quantity of electricity will have been sensibly lessened. Sometimes, when the season has been one of steady drought, the apparatus will emit sparks two or three days later, without having been brushed again.

Instead of brushing the board, the chain of an

electrical machine may be led to charge it; but then the board will be surcharged, instead of having a moderate quantity, as in the mode described.

*Proof.*—Take an electrometer, formed of two small pith balls hung on linen thread; present to it a jar charged by the machine, and they will fly apart; on the other hand, on presenting a jar charged from the electrophoros, and they will fly to each other.

This apparatus—though composed, like an electrical machine, of two bodies, one electric in itself, and the other so by communication—apparently produces contrary results. In the ordinary apparatus, two points are enough to carry off the electricity accumulated on the glass; but two points put under the board would not supply the electrophoros. In the first case, a touch of the conductor calls off the spark, but not in the second instance; in the former, one spark is all it emits, but many may be drawn from the other without need of its replenishment.

Probably the resinous board, having less electricity than the other, takes from it, when in contact, what it requires to equalize them: it is only thus it can be supplied with what it has lost.



### To Charge the Conductor with Electrical Matter, and Discharge it.

The electrical machine being firmly set on a table, the crank is turned so that the friction of the circular glass plate fills the conductor, with its spikes near it, with the electric fluid. You have fixed in your Leyden jar a top of wood, through which is a rod, A, ending in a metal chain within the jar, and in a knob, B, above it. To charge it, touch the conductor with the knob, while the machine is in action, when the fluid will flow into the jar until it is filled. To discharge it, let some good conductor reach from the knob to



FIG 210. the outside tinfoil.

### The Electric Chimes.

Hang three bells, A, B, and C, two inches in diameter, to a strip of brass plate, D, ten inches long, A and C being suspended by chains, but B by a silk cord; B also communicates by a chain, G, with the table, on which is placed the electrical machine.

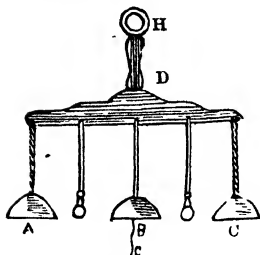


FIG. 211.

By silk cords, also, hang between the bells two brass balls or knobs, by way of clappers, which will strike the bells. The whole communi-

cates with the conductor by means of the ring, H.

When the conductor is electrified, the two bells will also be charged, and will attract the clappers, but as soon as they touch them, they are driven back, but on their touching the middle bell (since it has a communication with the floor), they lose their electricity and fly again to the bells, and so on. Thus they sound quite an alarum.



### To set Spirits of Wine on Fire by Electricity.

Having filled a large spoon or ladle with spirits of wine, a little heated (in electrical weather), and being



FIG. 212.

yourself electrified, the touch of your finger to the spirits will make it inflame at once.

The same effect will take place if a person, insulated on the plate, and electrified, holds the ladle in his hand,



and lets another person, not electrified, draw the spark, and *vice versa*.

*Observation.*—The spirits of wine can be set on fire by any non-electrical body, the same as with the finger, provided that such metals are used as are particularly apt to excite the strongest sparks.



### The House Struck by Lightning.

Let the model of a small house be made, as in the illustration. An iron rod, *A*, runs straight down through the roof to about half-way, where it ends in a ball, *B*. It also has a knob, *C*, above the roof at the upper end. A second rod, *D*, with a knob, *C*, at the top, is placed in the same line beneath it, with a space between the two rods, where a piece of cotton wool, full of powdered resin, is placed, or a little gunpowder.

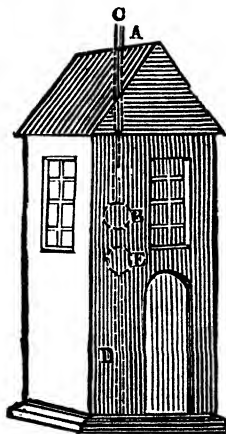


FIG. 213.

Having connected this miniature house with the outside of a jar, and the knob, *C*, with the conductor of an electrical machine, by which you charge it, the spark of the explosion will burst between the two knobs, *C* and *B*, and ignite the cotton wool, so as to give the house

the appearance of one set on fire. If the copper rod, *A*, ends in a point at *c*, the cotton wool will not catch fire.



### The Ship Struck by Lightning.

In the middle of a small boat set a mast made of a glass tube, eight inches long by one-half in diameter, filled with water. Cork both ends. Run through the corks two pieces of iron wire, with the ends nearest each other half an inch apart. The lower wire must go into the water on which swims the boat, and the upper one ends in a small knob.

*Performance*—Connect the outside of a battery with the lower wire, and the end of the iron chain which is connected with the inside of the battery with the end of the upper wire, when the explosion of the fluid, leaping from one wire to another, will shatter the tube, and sink the boat with a hole in the bottom.

### The Heavy Casket; or, The Thirteenth Labour of Hercules.

Hercules executed twelve pieces of work, which elevated him to the rank of a demi-god in antiquity. Yet all his superhuman strength might have failed him in performing the thirteenth task which we at present could offer him.

To bring a Nemæan lion before ladies, as Bully Bottom would say, is not our intention; nor would you like to have a hydra or Cerberus dragged on our little stage; we merely defy the potent King of clubs to lift up this insignificant box, which, you see, I carry on one finger.

But this coffer has the singular property of being sometimes very heavy, and at others feather light, so that the classical champion of lifting could not have made it budge unless he knew the secret of lessening the weight.

I place the casket on this pedestal. A child can move it with no exertion. Suppose you try, sir! Halloo!

the box resists. Oh, put both hands to it, and employ all your strength without fear. What! you try your utmost, and yet have not moved the box an inch! Your

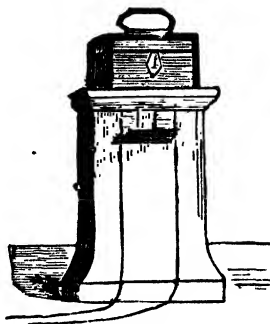


FIG. 214.

neighbour succeeds no better. There! I'll keep no secrets from you, so tell you that a puff of breath will blow away the spell. You have breathed upon it, and now, you see, you can lift it up by a thread.

*Explanation.*—For those spectators who do not believe, in this case, in what is vulgarly called a strong breath. The bottom of the casket is an iron plate, and

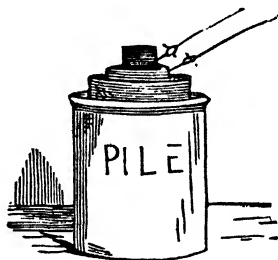


FIG. 215.

the top of the pedestal is an electric-magnet. From his hiding-place, an assistant, by means of a wire running down into the floor, cuts off or sets on the communication with an electric pile. Hercules would have

shattered his mace on it, much to his *a-mace*-ment, no doubt.



**The Crystal Cash-box ; or, How to send Money from  
Town to Town without a Post-office Order.**

Let us suppose that you wish to send from London to Liverpool some sum of money—say a pound—in eight half-crowns, which I shall beg to borrow from among the company. Kindly mark them so that you will know them again. Thank you.

I take them and return to my little stage, so as to be as far as possible from the audience (here the performer neatly exchanges the borrowed coins for another pile of coin, exactly alike, either by putting them on the table, where a trap performs the substitution instantly under his very hand, or by means of the inside shelf of the table).

If you are agreeable, the room will be Liverpool, and I London, and from here I shall send you the coin without any fear of robbers by the road.

There is no other apparatus required than this crystal casket, just brought timely in to me, and no secret but the way to use it, which is equally simple.

Yonder are two rings in the ceiling, and the casket having one each side of it, we can hang it up with these two cords with hooks very easily.

Thus no one need lose sight of it for one instant, and as it is of glass, it can be seen through. We will even swing it to and fro, so as to expose it more fully. I return to my place.

You remember that I represent London, and you Liverpool, and that the swinging box is your municipal treasury, into which I have to put a pound. I take the pile of half-crowns (a trap carries it away from under the performer's hand) and fling them into the casket. Hark to the crash and jingle ! That proves they safely reached their destination. Moreover, you can see them inside the box. And, over and above those pieces of confirmation, we will go open the coffer, take out the coins, and return them to you. Since every person recognizes his mark on them, we need only add, that this

is a well-tested means of sending money speedily, without troubling bankers.

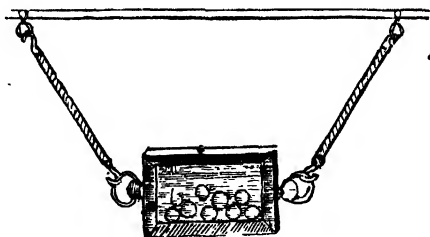


FIG. 216.

*Explanation.*—For though we described to the audience what they saw without the telling, there is something unseen as well as untold.

The two rings of the ceiling, by which the casket was suspended, are set in a neatly-concealed tube, which runs along within the ceiling to the wall, where it goes down inside to the spot where your assistant waits. This tube contains a copper wire, which, when put in contact with the electric battery, makes a little spring act which is in the rings. This spring pushes a second spring, hidden under the upper hooks of the suspension cords, through which runs a second wire. This wire moves similar springs in the lower hooks. These hooks act upon the rings of the box exactly as the rings of the ceiling were acted upon by the upper hooks. The springs in the box rapidly lift and let down an inside lining or false side, forming, with a second board (the outside), one of the sides of the box. Only the top and bottom are of glass. Between the side spoken of and its false bottom is space enough to hold the marked coins, which your confederate placed there, before he brought the casket in upon the stage. When he hears you say, "Now I fling the coin!" he lets the battery work, and the releasement of the springs lets the coins fall instantly.

The following trick is performed with a piece of mechanism similar in principle.

### The Magic Tripod; or, The Flying Coins.

I am an everlasting borrower, it's true, but as I always repay my debts, I hope you will be indulgent, and oblige me with half a dozen—say eight—crown-pieces. While they are being collected for me I will hang from the ceiling, with the cords, this very innocent tripod. The coins being now on my table, never having left your sight for an instant, you cannot accuse me of making away with them. As that might happen if I kept them in my hand, I lose no time in throwing them into this crystal bowl which I hold here. I beg to be excused for letting them drop so noisily, but I rather like you to hear as well as to see them fall.

This bowl possesses an incredible power--that of making silver put into it as light and diaphanous as the air itself. The experiment would cost me dear, of course, if, by way of *come pence sation*, the magic tripod yonder did not have the gift of attracting the volatilized pieces and solidifying them, as in the first instance. Listen attentively, if you please, for you are going to hear all of them fall, one by one, as they arrive. They have started on their flight, like so many balloons out of a besieged city. Prepare to count. Hark! One, two, three, four, five, six, seven, eight! The bowl is empty—all the coins have flown over into the tripod glass; but I am afraid you would not be satisfied at only having heard them, but must also see them. I unhook and take down the dainty little contrivance, and show that all are here—yes, not one crown has been lost on the journey; more than some monarchs can say who have had to flee from their realms!

*Explanation.*—It is just as well to keep it secret from the audience that the coins borrowed from among the spectators were intercepted by a trap, at the moment when you pretended to take them from the table to put them in the bowl, or box (for, of course, any vessel, or a box that may be locked, would do similarly). The sound which appeared to have been made by the coins falling, was really caused by an assistant off the stage dropping other coins forcibly into a glass dish.

As for the pieces found in the cup on the tripod, they

fell from the small cup over it (a roof, with a false bottom for its ceiling, which can be quite masked by artful ornaments of the apparatus, drawn more simply by us,

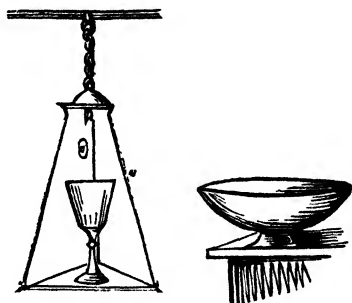


FIG. 217.

to show the working part, than it should appear). This cup seems but to be the ring on whose edge the cords are fastened. Of course the coins were placed there before the apparatus was brought on the stage. As the magician counts one, two, &c., an electric shock makes one coin fall, by the same system of rings and cords detailed in the description of the Crystal Cash-box.

### The Fantastic Clock.

I was once acquainted with a gentleman who prided himself on being the most punctual man in the world. To keep up his reputation, he had timepieces in every room of his house—two on a mantel-shelf. But such excess of precaution cost him dear—in the bills for keeping all the clocks in order! there was always one or two of them which would differ from the rest. If this person had the magic clock which I possess, he would have saved a large sum of money.

You see that this chronometer is composed modestly of a ring, by which to hang it, a little brass ball, by way of ornament, and a round plate of glass, quite transparent, save on the outer rim, where the minute ticks

and numerals for the hours are painted, and two gilt hands, quite free from mechanism. There are no works whatever, and hence no expense for regulating it. Yet this magic clock has the gift of pointing to any time of day at pleasure. It tells the time to a second, without ever being too fast or too slow.

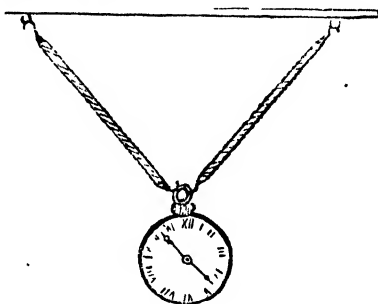


FIG. 218.

In order to make our test of its powers as conclusive as possible, we will go and hang it up just as we did with the Crystal Cash-box. There it dangles, completely cut off from the outer world.

Now command the hands to point to any hour you please, to go round one way or the other, to return, to stop, to start again—to turn as one orders, in short.

The lady in the striped opera cloak says, "Two o'clock!" There go the hands. Two it is.

"Four!" says the young lady in blue. You see the hour stated.

"Noon!" remarks Mr. Goody.

As the hands have a good way to go if they went on from four to twelve, you'll please excuse their taking the short cut by going back. There they spin! Twelve!

Or, taking up this pack of cards, I hold up a seven of hearts.

Master Chronos, what is the sum of the points on this card? — One, two, three, four, five, six, seven. *Seven!* Good!

Now, I pray thee, what is the number of the seat on



which sits Mr. Goody?—One, two, &c.—twenty! So it is.

What is the age of yonder lady in green?—Sixteen! Very good. Of madam in mauve?—Sixteen! Eh? In the burnouse?—Sixteen! Verily, the clock will not admit that a lady ever lives beyond her youth. Forgive its gallantry!

*Explanation.*—While the fantastic clock is proceeding to answer the questions being put to it, we will reveal the cause of its obedience. As it hangs from the ceiling by the same rings which supported the Crystal Cash-box, and the same cords, the same movement by electricity is communicated likewise, through the lower holes of the cords, to its ring. This is furnished with two small springs, one on the right, the other on the left; the former making the hands move forward, the other backward.



### The Sympathetic Bell.

Having hung a watch on two rings in a beam of the ceiling, which tells the hours, &c., at command, we hasten to give it a voice, by suspending, by similar rings, hooks, and silk cords, a bell with an outside clapper.

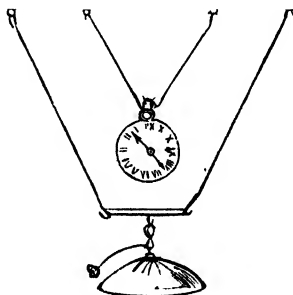


FIG. 219.

We order the hands of the clock to point out the hour, and at the same time, as if moved by sympathy, the

clapper works as if animated, and if the hands indicated seven, the bell sounds seven strokes.

The means are precisely on the same plan. An electric shock disengages the catch on the inner end of the clapper, and hence it falls and strikes the bell.

[We find that, although we believe we have wasted few or no words in our full yet concise descriptions, there are many amusing mysteries for parlour delectation yet to be unfolded. The reader is confidently referred to the excellent companion volume to this book, profusely illustrated and comprehensively formed, entitled, "The Art of Amusing."]

THE END.





ome of the experiments in this work—more especially  
 e which chiefly depend upon sleight of hand—require  
 onal instruction. Every information may be obtained of  
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That the former greatly preponderate is a grievous acknowledgment to make after assiduously devoting the leisure of half my life to the pursuit of information on this, to me, most fascinating subject. It is some consolation, however, to feel that where I cannot instruct, I shall certainly not mislead, and that the reader will find, under each head, all that is known to, or suggested by, the most competent writers I am acquainted with, either here or on the Continent.

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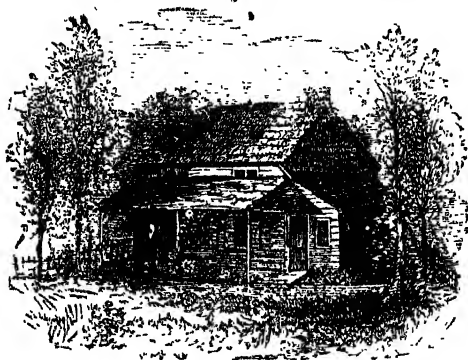
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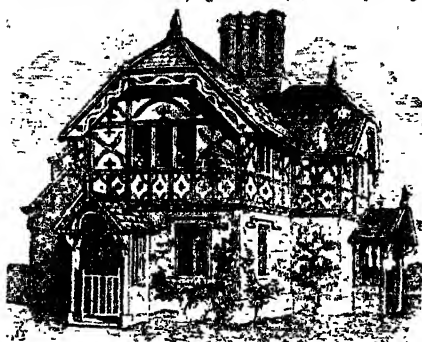
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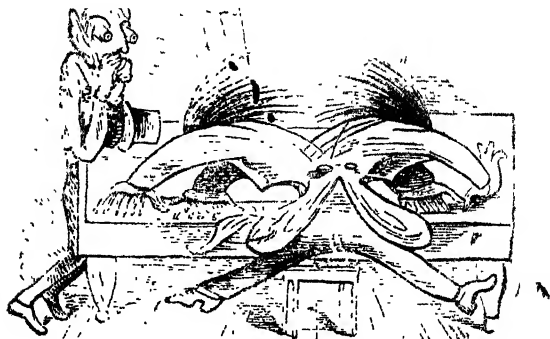
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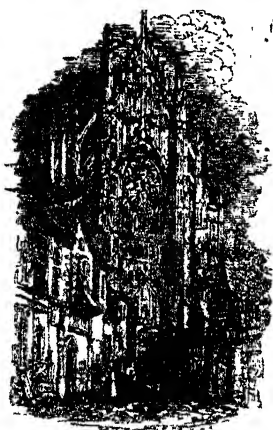


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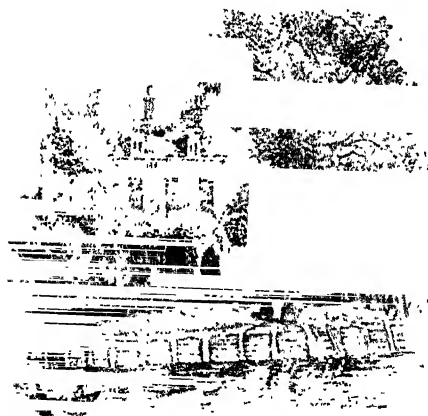
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 I saw when I  
 stepped out  
 of the car was  
 the sun. It was  
 a bright, warm  
 smile. I had  
 never seen it  
 like this before.  
 It was like a  
 giant hand  
 reaching out to  
 me. I felt like  
 I was being  
 welcomed. I  
 had never felt  
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